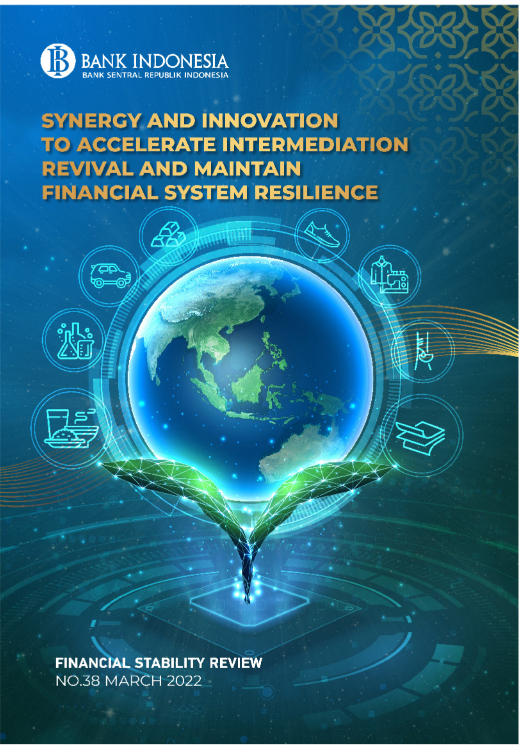
BANK INDONESIA
BANK SENTRAL REPUBLIK INDONESIA

SYNERGY AND INNOVATION TO ACCELERATE INTERMEDIATION REVIVAL AND MAINTAIN FINANCIAL SYSTEM RESILIENCE

FINANCIAL STABILITY REVIEW

NO.38 MARCH 2022



The halo and surrounding symbols denoting priority sectors represent policy synergy and innovation. Commitment in Indonesia and globally towards realising a sustainable economy and accelerating the green transition is symbolised by the leaf holding the globe with a focus on Indonesia. The intertwining Kawung batik motif that forms a solid whole exemplifies sustainable finance and support for Indonesia's G20 Presidency in 2022.

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MACROPRUDENTIAL POLICY DEPARTMENT

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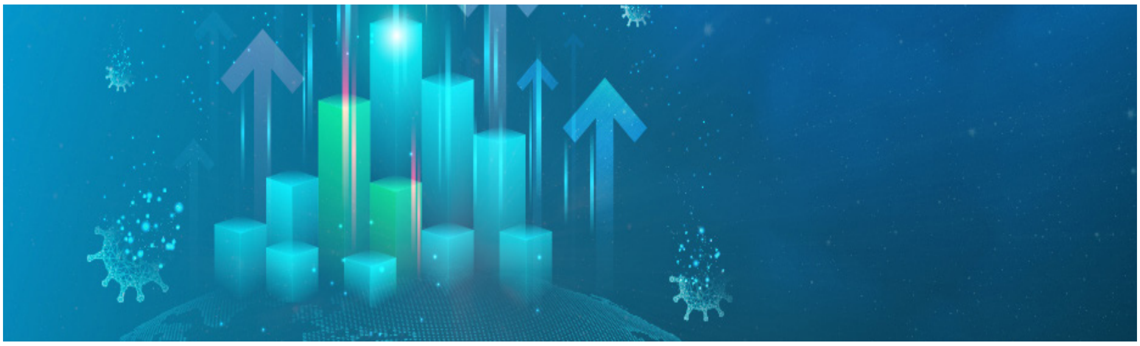

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Policy Response to Revive Intermediation and Maintain Financial System Resilience

LIST OF ABBREVIATIONS

AEs	Advanced Economies
AL	Liquid Assets
APBN	State Revenue and Expenditure Budget
AS	United States of America
ATM	Automated Teller Machine
ATO	Asset Turnover
Bansos	Social Aid Program
BAPPEBTI	Commodity Futures Trading Regulatory Agency
BCBS	Basel Committee on Banking Supervision
BI	Bank Indonesia
BEI	Indonesia Stock Exchange
BI7DRR	BI 7-Day Reverse Repo Rate
BPR	Rural Bank
Bps	Basis Point
BPS	Statistics Indonesia
BSPI	Indonesia Payment System Blueprint
BUK	Conventional Commercial Bank
BUMN	State-Owned Enterprise
BUS	Islamic Bank
CA	Current Assets
Capex	Capital Expenditure
CAR	Capital Adequacy Ratio
CCP	Central Counterparty
CCyB	Countercyclical Capital Buffer
CKPN	Provisions for Impairment Losses
COVID-19	Corona Virus Deaseas 2019
CPO	Crude Palm Oil
DAR	Debt at Risk
DNDF	Domestic Non-Delivery Forward
DPK	Third-Party Funds
DSR	Debt Service Ratio
EM	Emerging Market
EMDEs	Emerging Market and Developing Economies
EPU	Economic Policy Uncertainty
ETP	Electronic Trading Platform
FEKDI	Indonesia Digital Economy and Finance Festival
Fintech	Financial Technology
FSB	Financial Stability Board
FSSI	Financial System Stability Index
FTV	Financing to Value
GDP	Gross Domestic Product
GSO	Greenshoe Option

GWM	Reserve Requirements
ICR	Interest Coverage Ratio
IHK	Consumer Price Index (CPI)
IKSK	Financial System Vulnerability Index
IMF	International Monetary Fund
IPO	Initial Public Offering
ITO	Inventory Turnover
Kemenkeu	Ministry of Finance
KI	Investment Loan
KK	Consumer Loan
KKB	Automotive Loan
KKI	Indonesia Creative Works Exhibition
KMK	Working Capital Loan
KPR	Housing Loan
KP/PP	Property Loan/Financing
KSK	Financial Stability Review (FSR)
KSSK	Financial System Stability Committee
KUR	Micro Credit Program
LaR	Loan at Risk
LBUT	Integrated Commercial Bank Report
LCR	Liquidity Coverage Ratio
LCS	Local Currency Settlement
LDR	Loan to Deposit Ratio
LGA	Electricity, Gas and Water Supply
LoLR	Lender of The Last Resort
LPEI	Indonesia Eximbank
LPS	Indonesia Deposit Insurance Corporation
LTV	Loan to Value
MIR	Macroprudential Intermediation Ratio
MPLB	Macroprudential Liquidity Buffer
mtm	Month to Month
MV	Venture Capital
NAB	Net Asset Value (NAV)
NBFI	Nonbank Financial Industry
NIM	Net Interest Margin
NK	Memorandum of Understanding
NPF	Non-Performing Financing
NPI	Indonesia's Balance of Payments (BOP)
NPL	Non-Performing Loans
NSFR	Net Stable Funding Ratio
OJK	Indonesia Financial Services Authority
PBI	Bank Indonesia Regulation
PJP	Payment Service Provider
PJSP	Payment System Service Provider
PLJP	Short-Term Liquidity Assistance
PLJPS	Sharia Short-Term Liquidity Assistance
PLR	Prime Lending Rate
PoD	Probability of Default

POJK	OJK Regulation
PP	Finance Company
PPKM	Public Activity Restrictions
PPN	Value Added Tax (VAT)
PPNDTP	Government-borne VAT Program
PPnBM	Sales Tax on Luxury Goods
PSBB	Large-Scale Social Restrictions
ptp	Point to point
PUAB	Interbank Money Market
QE	Quantitative Easing
QRIS	Quick Response Indonesian Standard
RBC	Risk Based Capital
ROA	Return on Asset
ROE	Return on Equity
RPIM	Macroprudential Inclusive Financing Ratio
RT	Household
RTGS-BI	Real Time Gross Settlement Bank Indonesia
RWA	Risk-Weighted Assets
SBN	Tradeable Government Securities
SKNBI	National Clearing System
SSK	Financial System Stability (FSS)
ULN	External Debt
UMKM	Micro, Small and Medium Enterprises (MSMEs)
UUS	Sharia Business Unit
yoy	Year on year

FOREWORD

Out of the pandemic,
welcome a new and meaningful civilization,
The balance of life, prayer, and society
The balance of work, advancement, and nature
Enlightening the creation of man...

Perry Warjiyo
Bank Indonesia Governor

The global and domestic economies have continued to recover from the damaging impact of the protracted COVID-19 pandemic, with financial system stability also maintained. Recovery efforts are inextricably linked to the various challenges and uncertain conditions. COVID-19 has left a deep scarring effect on the global economy, including Indonesia. Improvements in the world economy remain intact, however, with growth potentially lower than previously projected, accompanied by elevated financial market uncertainty fuelled by escalating geopolitical tensions between Russia and Ukraine. Notwithstanding, the current challenges should not lead to despondency, instead providing strong motivation to welcome the economic recovery in 2022 with enthusiasm and optimism. To that end, well-calibrated, well-planned and well-communicated policies are required to confront the various challenges moving forward.

Policy coordination and synergy between and domestic authorities are key to recovery from the impact of COVID-19. Furthermore, 2022 is the year of Indonesia's G20 Presidency and the theme of Recover Together, Recover Stronger clearly portrays the spirit of Indonesia and other G20 countries to recover together and rise to confront the future challenges. The Ministry of Finance and Bank Indonesia have committed to six priority agendas in the Finance Track of Indonesia's G20 Presidency, namely: (1) Exit Strategy to Support Recovery, (2) Addressing the Scarring Effect to Secure Future Growth, (3) Payment System in Digital Era, (4) Sustainable Finance, (5) Financial Inclusion: Digital Financial Inclusion & SME Finance, and (6) International Taxation. Continued global collaboration and Indonesia's Chairmanship as G20 President are expected to produce the best solutions to ensure that all countries can recover together, while promoting policy reforms that support a stronger, sustainable, balanced and inclusive economy.

Financial system stability was maintained given the solid synergy built between the Government, Bank Indonesia, Financial Services Authority (OJK) and Indonesia Deposit Insurance Corporation (LPS) under the auspices of the Financial System Stability Committee (KSSK). Through such synergy, the KSSK formulated an across-the-board and sector-specific Integrated Policy Package. In addition, Bank Indonesia is committed to strengthen policy synergy with the KSSK and other relevant institutions in the context of the national policy mix to maintain financial system stability and revive lending to the corporate sector and other priority sectors, while increasing inclusive finance.

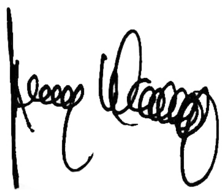
Internally, Bank Indonesia continues to strengthen its policy mix through various innovations to revive intermediation and maintain financial system resilience. In response to domestic economic recovery momentum, Bank Indonesia is gradually normalising liquidity policy, while safeguarding the banking industry's ability to extend loans/financing to the business community, and purchasing tradeable government securities (SBN) to fund the State Revenue and Expenditure Budget (APBN). Meanwhile, Bank Indonesia has maintained and strengthened accommodative macroprudential policy to revive a balanced and quality bank intermediation function, particularly for the real sector.

To that end, Bank Indonesia has maintained looser Loan/Financing-to-Value (LTV/FTV) policy for property loans/financing and downpayment requirements on automotive loans/financing to accelerate intermediation, which is currently recovering. Bank Indonesia also strengthened the Macroprudential Inclusive Financing Ratio (RPIM) to increase the banking industry's contribution in terms of disbursing inclusive financing to MSMEs and low-income earners based on bank' expertise and business models applied, while maintaining risk management and prudential principles. Meanwhile, Bank Indonesia also relaxed rupiah reserve requirements for banks extending funds to inclusive economic activities. Against a backdrop of relatively contained credit risk, this policy is expected to support a sectoral recovery and ultimately improve national economic performance. Bank Indonesia has also maintained prime lending rate (PLR) transparency to elicit lower lending rates in the banking industry as well as held the Countercyclical Capital Buffer (CCyB), Macroprudential Liquidity Buffer (MPLB) and Macroprudential Intermediation Ratio (MIR), while gradually reintroducing the lower disincentive parameter to revive credit growth.

With the blessings of Allah SWT, Bank Indonesia presents the 38th edition of the Financial Stability Review (FSR), March 2022, entitled Synergy and Innovation to Accelerate Intermediation Revival and Maintain Financial System Resilience. FSR 38 contains macrofinancial analysis and assessments of financial system stability conditions in 2021, the policy response and impact on financial system stability in the second semester of 2021 as well as the outlook and macroprudential policy direction for 2022. FSR is presented to participants and decision-makers in the national financial industry, government institutions and authorities, academia, members of the public and Bank Indonesia's international partners. Furthermore, FSR also serves as a reference for all stakeholders to solidify synergy together and revive the national economy, while maintaining financial system stability.

Look, the sky and universe are blue again,
The order of life and the universe in new balance,
Environmental awareness is the new culture,
Thank God for the blessing of a new civilisation.

Jakarta, May 2022



Bank Indonesia Governor

Perry Warjiyo

EXECUTIVE SUMMARY

SYNERGY AND INNOVATION TO ACCELERATE INTERMEDIATION REVIVAL AND MAINTAIN FINANCIAL SYSTEM RESILIENCE

Financial system stability was maintained in the second semester of 2021 despite the various challenges overshadowing the global and domestic economic recoveries. Such conditions were confirmed by a stable Financial System Stability Index (FSSI) in the normal zone. Policy synergy has been key to sustaining financial system stability, realised through an accommodative national policy mix. In line with the national policy mix, the Bank Indonesia policy mix in 2021 was oriented towards accelerating the national economic recovery and maintaining stability. This was achieved by holding a historically low policy rate, supported by rupiah exchange rate stabilisation measures, an accommodative macroprudential policy stance and accelerating payment system digitalisation. Despite the challenges posed by recovery divergence between advanced and developing economies, outbreaks of the Delta variant of COVID-19, market anticipation of policy tapering by the US Federal Reserve, as well as concerns over inflationary pressures and energy scarcity, the ongoing global recovery has stimulated exports from Indonesia and helped to maintain domestic recovery momentum. The recovery remains intact despite a spike of Delta cases in the second half of 2021, which compressed domestic demand. Overall, the economy grew 3.69% (yoy) in 2021, improving significantly from a 2.07% (yoy) contraction in 2021, supported by a fast vaccination program rollout, increasing mobility and digitalisation innovation as key drivers of the economic recovery.

Though financial system stability has been maintained, the scarring effect of a prolonged COVID-19 pandemic on the financial sector is significant. The pandemic has had a scarring effect on various corporations and looms large over informal and low-skilled workers, dominated by low-income earners, triggering potential risk in terms of financial system resilience. Structural reforms are required in the medium-long term, accompanied by comprehensive improvement measures.

The bank intermediation function continued to improve gradually on increasing demand for financing in response to recovering corporate and household sector performance. Stable corporate performance in line with increasing mobility and higher commodity prices during the second semester of 2021 helped to revive bank intermediation. Growth of corporations serving the export market outpaced domestic oriented businesses. Rebounding sales increased corporate activity and profitability. Recovery in the corporate sector also had a knock-on effect in terms of increasing household income and consumption. Household demand for credit increased, particularly housing loans, thus supporting intermediation. Such conditions were also consistent with a shift in household placements to other financial assets and property given comparatively low term deposit rates. In addition, a looser loan-to-value (LTV) ratio and value added tax (VAT) stimulus on property purchases helped to revive property financing.

Improving risk perception in the banking industry boosted bank lending on the supply side. The results of a Bank Indonesia survey showed that banks relaxed lending standards in 2021, as reflected by a lower Index of Lending Standards compared with conditions in 2020. Such developments point to improving risk appetite in the banking industry following stronger business performance, particularly in terms of sectors with a promising outlook and risk profile. Lower risk perception in the banking industry was also indicated by lower interest rates on new loans due to a lower risk premium as a corollary of policies to strengthen prime lending rate transparency, which have encouraged banks to reduce lending rates.

Non-bank financing continued to support economic recovery. With a relatively lower cost of capital amid a historically low policy rate maintained by Bank Indonesia, corporate financing through bond issuances, initial public offerings (IPO) and rights issues remained positive. Fundraising through IPOs and rights issues in 2021 was the highest recorded in the past five years. Two corporations from New Economic sectors were the main contributors to the high IPO value. In the same year, FinTech lending in Indonesia also grew rapidly as an alternative for individual and corporate borrowers. In addition to FinTech lending, security crowdfunding (SCF) continued to make limited gains in Indonesia. The small size of the FinTech lending industry contributes to the limited risks to financial system stability. Nevertheless, the risks continued to demand vigilance. Beyond lending, rapid development of crypto assets in Indonesia is a manifestation of digitalisation. Inter-authority coordination is required, therefore, to create an optimal balance between innovation and risks in terms of trading crypto assets in Indonesia.

From a corporate, household and banking perspective, the domestic financial system remained resilient despite the Delta variant outbreak of COVID-19. Corporate resilience was supported by ample liquidity and controlled leverage. Corporate repayment capacity in the second semester of 2021 continued to recover, as reflected by a median interest coverage ratio (ICR) exceeding the 1.5 threshold. Meanwhile, the debt-to-equity ratio (DER) in the latter half of 2021 was stable in the 70-71% range, indicating that corporations relied on internal funds to meet their financial obligations. Despite improving performance, several corporations impacted by the pandemic have potentially been affected by the scarring effect, particularly small enterprises and corporations in construction, air transportation as well as accommodation and food service activities, as confirmed by a stable probability of default at the end of 2021 compared with conditions at the end of 2020. Notwithstanding, most corporations maintained resilience, which is gradually improving in line with operational performance. Stronger corporate performance has also increased job availability and household income, thereby bolstering resilience in the household sector. Better conditions in the real sector helped to mitigate credit risk in the banking sector during the second semester of 2021. Non-performing loans (NPL) and Loans at Risk (LaR) in the banking industry were lower at the end of 2021 than in 2020 but have not yet reached pre-pandemic levels. Lower credit risk was also reflected by a broad-based decrease of outstanding restructured loans across all segments, indicating early signs of increasing repayment capacity amongst borrowers impacted by the pandemic.

Banking industry resilience was still supported in 2021 by ample liquidity and adequate capital. In 2021, rights issues increased total capital in the banking industry. Larger core capital contributed to a higher Capital Adequacy Ratio (CAR) in the banking industry, reaching 25.67%, thus demonstrating the banking industry's ability to absorb risk moving forward. The ratio of liquid assets to third-party funds at the end of 2021 increased to 35.12% from 31.67% at the end of the previous year. Bank propensity to purchase securities in an effort to optimise liquid assets also strengthened liquidity resilience in anticipation of immediate liquidity needs, while simultaneously indicating bank capacity to revive the intermediation function.

In terms of economic and financial inclusion, improving MSME performance accelerated MSME credit growth and mitigated credit risk. MSME loans maintained significant growth on the back of increasing demand triggered by recovering business activity. Robust MSME loan growth was also supported by government and regulator efforts to optimise disbursements of People's Business Loans (KUR). Rapid growth of digital credit has increased the inclusiveness of bank loans at a micro level. On the supply side, lower risk perception in the banking industry amid contained credit risk helped to revive MSME credit growth, as reflected by a looser MSME Lending Standards Index in 2021 compared with conditions one year earlier.

Bank Indonesia continued to strengthen policy synergy with the Government to maintain financial system stability and accelerate the national economic recovery. Among others, coordination was achieved through implementation of the Integrated Policy Package issued by the Financial System Stability Committee (KSSK). The Integrated Policy Package includes across-the-board and sector-specific policy synergy. Meanwhile, policy synergy was also maintained to revive loans/financing disbursed by the banking industry and other financial institutions to the real sector.

Seeking to revive a balanced and quality bank intermediation function, Bank Indonesia maintained accommodative and innovative macroprudential policy in synergy with KSSK policy. On the demand side, Bank Indonesia maintained a looser loan-to-value (LTV) ratio for property loans and financing-to-value (FTV) ratio for property financing as well as looser downpayment requirements on automotive loans/financing to stimulate intermediation in the property and automotive sectors. Such policy measures were implemented in synergy with VAT stimulus policy targeting property purchases and the sales tax exemption on luxury goods (PPnBM) issued by the Ministry of Finance as well as looser risk-weighted asset (RWA) requirements for property and automotive loans/financing by the Financial Services Authority (OJK). On the supply side, Bank Indonesia also increased economic inclusion and expanded access to finance, while strengthening the national economic recovery contribution of MSMEs through Macroprudential Inclusive Financing Ratio (RPIM) policy. RPIM is the innovative modernisation of the MSME Credit Ratio. In addition, Bank Indonesia also maintained accommodative and pro-growth macroprudential policy in the form of prime lending rate transparency, which effectively lowered lending rates in the banking industry throughout 2021, held the countercyclical capital buffer (CCyB) at 0%, set the Macroprudential Intermediation Ratio (MIR) at 84-94% with disincentive parameters and the Macroprudential Liquidity Buffer (MPLB) at 6% for conventional commercial banks and 4.5% for sharia banks. Meanwhile, Bank Indonesia also maintained various payment system digitalisation initiatives, accelerated money market deepening and developed the green economy and finance to support sustainable economic growth.

Based on the promising economic recovery outlook, financial system stability is expected to be maintained in Indonesia throughout 2022 despite various challenges that demand vigilance. Solid domestic economic growth is projected in line with a flattening of the Omicron variant curve. The salient economic challenges moving forward include policy tapering in advanced economies, relatively limited fiscal space, the scarring effect of a prolonged pandemic that requires structural reform, transition towards a green economy to help combat climate change as well as the geopolitical tensions between Russia and Ukraine. The current geopolitical risks could potentially undermine real sector improvements and increase risk perception in the banking industry, thereby influencing the supply and demand of credit in 2022 and potentially impeding the recovery and financial system resilience.

Bank Indonesia will continuously monitor economic dynamics and formulate follow-up policy measures as required. Synergy with the Government and other financial authorities will be strengthened to maintain macroeconomic and financial system stability, while accelerating the national economic recovery. Bank Indonesia will also continue to optimise its policy mix strategy to maintain stability and support economic recovery across the five policy pillars, namely monetary, macroprudential and payment system policies, financial market deepening as well as the green economy and inclusive finance. As a long-term sustainability measure, Bank Indonesia will formulate the Bank Indonesia Green Policy and Institutional Framework.

From a macroprudential perspective, accommodative and innovative policies will be maintained as well as policy synergy with government institutions and agencies to revive the bank intermediation function. Financial system resilience is expected to remain under control, accompanied by a stronger bank intermediation, with credit growth and deposit growth projected at 6-8% and 7-9% in 2022. Credit growth in 2022 is supported by optimism concerning monetary and economic conditions, coupled with relatively contained credit risk. The accommodative macroprudential policy stance will support national economic recovery momentum by maintaining financial system stability in line with prevailing economic conditions and dynamics.

BANK INDONESIA

Chapter 01

RECOVERY OF MACROFINANCIAL CONDITIONS INTACT

The global economic recovery remains intact despite divergence and various challenges moving forward. The global recovery has been sustained by an effective policy response and well-communicated monetary policy by authorities in various jurisdictions. Notwithstanding, a multispeed recovery persisted in the second semester of 2021, with advanced economies recovering more quickly than developing economies, excluding China. In addition, the economic recovery has been blighted by ubiquitous uncertainty, primarily triggered by the Delta variant outbreak of COVID-19, market anticipation of policy normalisation by the US Federal Reserve as well as concerns over prolonged inflationary pressures caused by supply chain disruptions and energy scarcity. Moving forward, several challenges will continue to demand attention in emerging economies, including Indonesia, including policy tapering in advanced economies, limited fiscal space, a deep scarring effect that requires structural reform and comprehensive recovery efforts, transition towards a green economy to combat climate change as well as ongoing geopolitical tensions between Russia and Ukraine.

The domestic macrofinancial recovery persists with financial system stability maintained despite a deep scarring effect from the prolonged pandemic. In the second semester of 2021, positive global and domestic economic developments helped to maintain financial system stability, as reflected by increasing banking industry resilience, early signs of improvement in the bank intermediation function, with the risks contained, as well as ample liquidity in the banking system. Policy synergy is key to financial system stability, as realised through an accommodative national policy mix. Nevertheless, a deep scarring effect caused by the protracted pandemic has had a significant impact on the financial sector in the form of lower corporate productivity due to restrictions on economic activity, adversely affecting the workforce, with layoffs experienced in the long term. Furthermore, the impact has been transmitted to the financial sector through a decline of the intermediation function and weaker financial system resilience. In terms of households, the scarring effect primarily affects informal and low-skilled workers. Seeking to overcome such conditions, financial sector authorities in Indonesia, under the auspices of the KSSK, issued an Integrated Policy Package to revive financing to the corporate sector and accelerate economic recovery.

Digitalisation is a key driver of economic recovery, while anticipating the risks moving forward. Accelerating digitalisation and innovation in the financial sector is key to driving economic recovery efforts, particularly in terms of increasing cost efficiency. A reliable payment system and innovative e-commerce and financial services providers are helping to hasten economic and financial digitalisation. The emergence and rapid growth of FinTech provide alternative financing channels for businesses and individuals. In addition, digitalisation has also prompted rapid development of crypto assets in Indonesia. On the other hand, the adoption of digitalisation by financial services institutions has brought about many advantages for the financial system and customers, yet also created complexity and new challenges for the regulatory and supervisory framework. Inter-authority coordination is required, therefore, to strike an optimal balance between innovation and the risks that emerge from digitalisation.

1.1 Global Economic Recovery Intact Despite Emerging Challenges

Global economic improvements persisted in 2021 despite a diverging recovery overshadowed by financial market uncertainty. Rapid economic gains at the beginning of 2021 were restrained moving into the second semester as a corollary of the Delta variant outbreak of COVID-19. Economic recovery in advanced economies (AE), particularly the United States (US), proceeded more quickly on the back of a faster vaccination rollout, coupled with massive fiscal and monetary policy stimuli. In most emerging markets and developing economies (EMDEs), however, excluding China, the economic recovery process was slower given the limited supply and access to vaccines along with limited fiscal and monetary stimuli. In 2021, the world economy grew 5.7% (yoy) after contracting 3.1% (yoy) in 2020 (Table 1.1.1). Meanwhile, global financial market uncertainty, particularly in the latter half of 2021, was elevated by several risks on the downside, dominated by Delta variant transmission, market anticipation of policy tapering by the US Federal Reserve and concerns that inflationary pressures could persist due to supply chain disruptions and energy scarcity.

Several pandemic-related issues and challenges continued to demand vigilance and must be anticipated. In general, the issues and challenges primarily stem from the divergent policy response instituted in different jurisdictions to recover

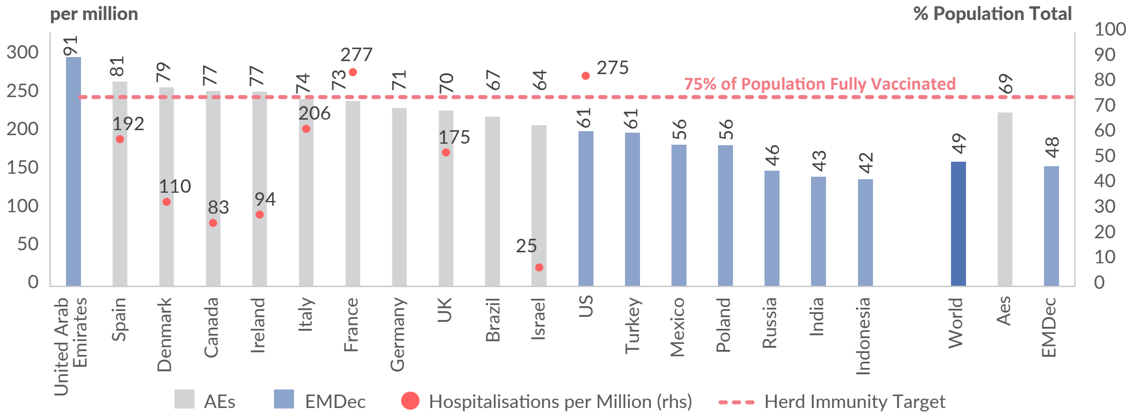
Table 1.1.1. World Economic Growth

Jurisdiction	(%, yoy)			
	2019	2020	2021*	2022*
World	**2.8**	**-3.1**	**5.7**	**4.4**
Advanced Economies	**1.7**	**-4.5**	**5.1**	**3.8**
United States	2.3	-3.4	5.7	3.8
Europe	1.5	-6.3	5.2	4.2
Japan	0.0	-4.6	1.6	2.7
Emerging Markets and Developing Economies (EMDec)	**3.7**	**-2.1**	**6.1**	**4.8**
China	6.0	2.3	8.1	5.2
India	4.8	-7.1	9.0	8.2
ASEAN-5	4.9	-3.4	3.9	5.4
Latin America	0.1	-7.0	5.1	2.8
European Periphery Countries	2.5	-2.0	4.7	3.7
Middle East and Central Asia	1.5	-2.8	4.1	3.8

Source: International Monetary Fund (IMF), World Economic Outlook.
*Bank Indonesia Projections

the economy from the deleterious impact of the pandemic. In this context, several aspects must be anticipated effectively. *First*, a multispeed vaccination rollout towards achieving herd immunity (Graph 1.1.1). *Second*, a divergent global economic recovery process between AEs and EMDEs. *Third*, global supply chain disruptions and the threat posed by energy scarcity. *Fourth*, asynchronous exit policy between AEs and EMDEs, and the impact of global financial market uncertainty. *Fifth*, the scarring effect of a prolonged pandemic on global business and the risks to economic recovery sustainability and financial system stability. *Sixth*, rapid economic and

Graph 1.1.1. Global Vaccination Rates



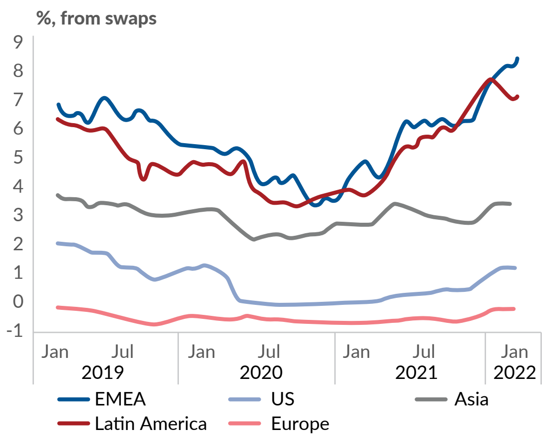
Source: Our World in Data, Ministry of Health of the Republic of Indonesia, data as of 31st December 2021
Notes: Vaccination data for Indonesia calculated based on Total Vaccinations/2/Population = **51.96%**

financial digitalisation dominated by BigTech, coupled with greater expansion of cross-border payments. *Seventh*, growing calls for the green economy and sustainable finance in AEs, the transition towards which requires adequate preparation in EMDEs. The pace of recovery in any given country will depend heavily on the effectiveness of anticipating and mitigating such issues and challenges.

Persistent inflationary pressures have compelled central banks in advanced economies, particularly the US, to accelerate monetary policy normalisation. Among others, inflationary pressures stem from prolonged global supply chain disruptions and the threat posed by energy scarcity. In December 2021, the Fed announced plans to increase the tapering off of asset purchases from USD15 billion per month to USD30 billion per month, with the quantitative easing (QE) program thus expected to end in March 2022, sooner than previously forecast. In response to the Federal Reserve's plan and escalating inflationary pressures, a number of EMDEs hiked policy rates, thereby raising expectations of higher policy rates moving forward (Graph 1.1.2), accompanied by significantly higher global interest rate volatility (Graph 1.1.3).

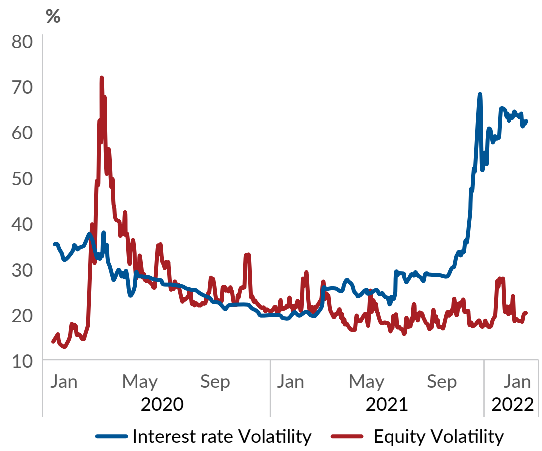
The high vulnerability of the financial and non-financial sectors intensified pressures on economic recovery efforts. In the financial sector, the threat of redemptions by investors persisted after a similar event in March 2020, accompanied by significant mismatch risk in the duration of assets and liabilities in the insurance sector caused by low global interest rates. In the non-financial sector, solvency risk among non-financial corporations (NFCs) impacted by the pandemic continued to demand attention, particularly among corporations in the services and transportation sectors as well as small enterprises. In addition, inflationary pressures accumulated at the producer level in the third quarter of 2021 due to a spike in commodity prices, coupled with supply chain disruptions, including scarce raw materials, delayed shipping times due to container shortages that pushed up shipping costs for several commodities as well as labour scarcity. Such inauspicious conditions threatened financial recovery in the corporate sector and could potentially exacerbate inflationary pressures at the consumer level moving forward, thus undermining the economic recovery.

Graph 1.1.2. Market Expectations of Policy Rates



Source: Bloomberg
Notes: EMEA (Europe, Middle East and Africa)

Graph 1.1.3. Implied Volatility Index



Source: Bloomberg, processed

Furthermore, geopolitical tensions between Russia and Ukraine that began at the beginning of 2022 also escalated pressures on the economic recovery outlook, inflation expectations and global financial market sentiment.

Global economic recovery sustainability is inextricably linked to the effectiveness of the global policy response. At the beginning of the pandemic, most authorities globally focused on providing incentives to the health sector, accompanied by targeted fiscal support, accommodative monetary policy and monitoring the risks posed to financial system stability. Entering the recovery stage, however, the global policy response focused on increasing productive capacity and providing incentives for efficient resource allocation. Relatively limited fiscal space post-pandemic remains a challenge in and of itself for the competent authorities when formulating an optimal policy response. In addition, the authorities are also facing the challenges associated with normalising monetary policy due to the inherent trade-off between overcoming inflationary pressures and the costs that emerge due to a potential slowdown in the labour market recovery. The policy response varies in different jurisdictions depending on local inflation conditions, job availability and the strength of the central bank's policy framework. Extraordinary support measures are expected to persist in Europe and Japan to strengthen the economic recovery. In contrast, the US is expected to unwind support measures in 2022 with potentially higher interest rates. The policy response in emerging markets and developing economies is influenced by domestic issues and imported inflation stemming from global supply chain disruptions. Such conditions underscore the importance of monitoring the main indicators of inflationary pressures moving forward, including inflation expectations, wages, operational costs and corporate profit margin, which can reveal indications of cost pressures and potentially impact prices.

Policy normalisation in advanced economies will also pose specific challenges for central banks and governments in developing economies. A higher rate of return in advanced economies will trigger capital outflows from developing economies and intensify currency pressures that could spur inflation. This will increase the burden of foreign currency loans in both the public and private sectors. In general, policy normalisation is more applicable to developing economies to mitigate the risk of persistently higher inflation. Financial markets in developing economies are also considered adequately resilient, supported by solid capital reserves and a healthy current account compared with conditions during the taper tantrum in 2013.

Public sector financial conditions are expected to experience pressures given record levels of government debt globally to overcome the pandemic, especially amid lower tax revenues. Consequently, governments in various jurisdictions are striving to reduce fiscal deficits moving forward. Higher economic growth and tax revenues are desperately required in many countries to avoid debt pressures. Such challenges highlight the importance of structural reforms and improvements to the fiscal framework.

Effective monetary policy communication is key to avoiding excessive financial market reaction to monetary policy normalisation. In countries experiencing higher inflation expectations and the risk of persistent price pressures, the central bank is expected to provide unambiguous signals that unwinding support measures will be recalibrated if pandemic conditions deteriorate again. In addition, monetary policy normalisation that is not well communicated could cause investors to reassess a country's economic and policy outlook, which could subsequently increase financial sector vulnerability and tighten financial conditions. If this occurs, the central bank must reformulate its policy stance to overcome financial sector vulnerabilities.

Structural reforms and comprehensive recovery efforts are required to nurture higher long-term growth and overcome the scarring effect of the pandemic. The labour market must adapt to post-pandemic conditions by increasing its capacity to face the digital era. Digitalisation efforts and the adoption of new technologies must be encouraged to reduce tariffs and barriers to trade, thus helping to overcome supply chain disruptions and inflationary pressures globally. International cooperation must also be strengthened to reinforce the supply chain and reduce shocks moving forward.

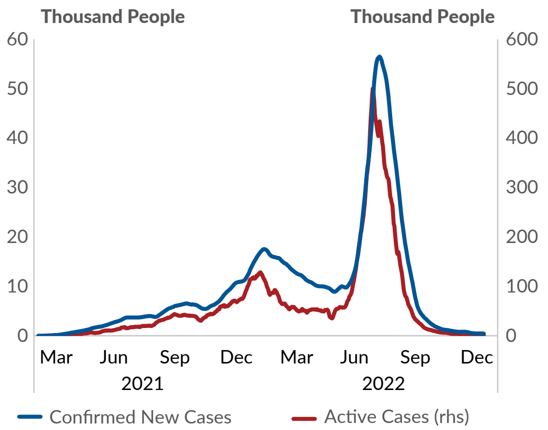
During the ongoing global economic recovery, most countries must consider a green transition to combat climate change. Large-scale financing is required for the green transition, which remains a challenge for countries wishing to implement green finance policy. Schemes that can benefit from green instruments are required to attract more investment and support the transition towards green finance in developing economies. In addition, commitments by advanced economies and partnerships between public and private investors are required to support financing for developing economies. The Government of Indonesia, therefore, continues to advocate the climate agenda during Indonesia's G20 Presidency in 2022 to ensure that the green transition is just, orderly and affordable, particularly in developing economies and poorer countries. In addition, the policy mix must consider and minimise the consequences stemming from the green transition. Efforts to reduce emissions in the energy sector through a fossil fuel phase-out must be well calibrated and implemented gradually, with support for affordable access to infrastructure development and sustainable low-carbon technologies, while minimising socio-economic losses in developing and vulnerable countries and mitigating legal risks.

Indonesia's national economic recovery process in 2021 was influenced by COVID-19 pandemic developments, which will remain a challenge in 2022. The domestic economic improvements achieved in the first semester of 2021 were restrained slightly at the beginning of the second semester of 2021. A spike in Delta variant COVID-19 cases in the third quarter of 2021 (Graph 1.2.1) and the ensuing mobility restrictions suppressed domestic demand. Notwithstanding, the domestic economic recovery process resumed in the fourth quarter of 2021 with broad-based gains across nearly all GDP components (Table 1.2.1). Overall in 2021, the economy grew 3.69% (yoy), improving significantly from a 2.07% (yoy) contraction in 2020. The national economic recovery process in 2022 is projected to remain intact on the back of a faster vaccination program rollout, broader reopening of economic sectors and ongoing policy stimuli, though the impact of geopolitical tensions between Russia and Ukraine on the domestic economy will continue to demand vigilance.

1.2 Domestic Macrofinancial Recovery Overshadowed by Scarring Effect of Protracted Pandemic

In the second semester of 2021, share prices and rupiah exchange rate stability remained relatively under control. Economic recovery optimism at the end of 2021, stoked by successful government COVID-19 containment measures and the faster vaccination program rollout, dampened stock market price index volatility in Indonesia at the end of 2021 compared with conditions one year earlier. Similarly, stock market price index volatility also abated in neighbouring countries throughout 2021 (Graph 1.2.2). Rupiah exchange rate stability was maintained in the second half of the year, bolstered by lower global financial market uncertainty and a promising economic outlook for the end of 2021 and 2022 (Graph 1.2.3). In addition, Bank Indonesia's triple intervention policy in the domestic foreign exchange market successfully maintained rupiah exchange rate stability and market confidence.

Graph 1.2.1. Daily COVID-19 Cases



Source: COVID-19 Task Force, processed
Data as of 30th December 2021

Financial system stability was well maintained throughout 2021 in line with national economic improvements. This was reflected by a Financial System Stability Index (FSSI) in the normal zone in the second semester of 2021 at a level of 0.67 (Graph 1.2.4), despite increasing slightly from 0.60 in the first semester of 2021. Pressures on financial institutions increased marginally, contrasting milder financial market pressures in line with lower volatility.

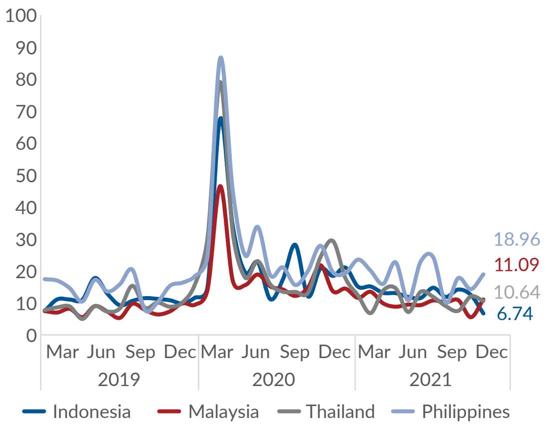
Policy synergy, as reflected by an accommodative national policy mix, remained key to financial system stability. Various efforts to strengthen financial sector resilience stemmed from policy synergy under the auspices of the national policy mix framework. Bank Indonesia held a historically low policy rate and maintained accommodative macroprudential policy, including a looser Loan/Financing-to-Value (LTV/FTV) ratio, while the Government implemented various guarantee programs and tax incentives, including a sales tax exemption on luxury goods (PPnBM) and government-borne VAT incentive for

Table 1.2.1. National Economic Growth

Component	(%, yoy)										
	2019	2020				2020	2021				2021
		I	II	III	IV		I	II	III	IV	
Household Consumption	5.04	2.83	-5.52	-4.05	-3.61	-2.63	-2.21	5.96	1.02	3.55	2.02
NPISH Consumption	10.62	-4.99	-7.78	-1.92	-2.09	-4.25	-3.69	3.99	2.79	3.29	1.59
Government Consumption	3.27	3.80	-6.92	9.79	1.79	1.96	2.55	8.06	0.62	5.25	4.17
Investment (GDFCF)	4.45	1.70	-8.61	-6.52	-6.17	-4.96	-0.21	7.52	3.76	4.49	3.80
Building Investment	5.37	2.76	-5.26	-5.60	-6.63	-3.78	-0.74	4.36	3.36	2.48	2.32
Non-Building Investment	1.83	-1.46	-18.62	-9.16	-4.76	-8.44	1.44	18.50	4.96	10.40	8.42
Exports	-0.48	0.17	-12.43	-13.04	-6.89	-8.14	6.94	31.50	29.16	29.83	24.04
Imports	-7.13	-5.44	-20.74	-24.49	-15.83	-16.72	4.41	31.84	29.95	29.60	23.31
GDP	**5.02**	**2.97**	**-5.32**	**-3.49**	**-2.17**	**-2.07**	**-0.70**	**7.07**	**3.51**	**5.02**	**3.69**

Source: Statistics Indonesia

Graph 1.2.2. Stock Market Volatility in the Region



Source: Bloomberg

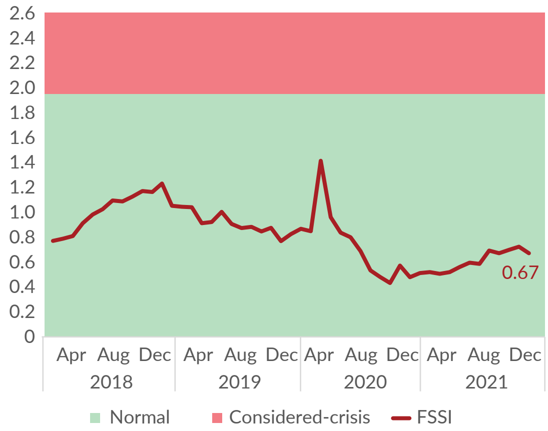
Graph 1.2.3. Currency Movements in the Region

Source: Bloomberg

micro, small and medium enterprises (MSME), OJK issued loan restructuring policy and LPS maintained a low deposit insurance rate.

The financial sector maintained performance throughout 2021. As the dominant entity, the banking industry was the main driver of financial sector performance. A high Capital Adequacy Ratio (CAR) in the banking industry pointed to robust financial system resilience, increasing to 25.67% in the second semester of 2021 from 23.81% in the second semester of 2020 (Graph 1.2.5). The main contributor to the higher CAR was core capital, which outpaced risk-weighted assets (RWA) in the banking industry. Compared with conditions in the second semester of 2020, RWA in the second semester of 2021 increased, indicating a return of risk appetite in terms of bank lending.

Graph 1.2.4. Financial System Stability Index (FSSI)



Source: Bank Indonesia

Stronger banking industry resilience in 2021 was accompanied by a revival of the bank intermediation function after experiencing a contraction in 2020. Credit growth hit 5.24% (yoy) in 2021, driven by supply and demand-side improvements (Graph 1.2.6). On the supply side, credit growth was boosted by a looser Lending Standards Index (LSI) accompanied by increasing third-party funds. On the demand side, a corporate sector recovery stimulated credit growth, particularly amongst priority sectors as the object of incentive policies. A balanced and quality intermediation function remains a prerequisite of financial system stability. Balanced intermediation can be achieved by optimising disbursed loans considering that third-party funds have continued to grow significantly during the pandemic, while loans/financing have contracted gradually, leading to imbalances in the intermediation function.

Graph 1.2.5. CAR, Core Capital and Risk-Weighted Assets (RWA)

Source: OJK

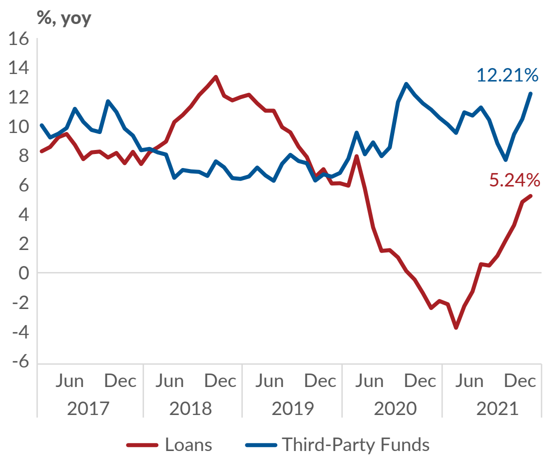
Notwithstanding, the latest trends show that increasing disbursed loans/financing will restore a more balanced intermediation function.

Bank intermediation quality has improved, with the risks contained. Non-performing loans (NPL) in the banking industry improved slightly in December 2021 to 3.00% from 3.06% in December 2020 (Graph 1.2.7). Though NPL decreased, the NPL of restructured loans increased after the banks downgraded non-viable borrowers to minimise the potential cliff edge effect after OJK regulation expires. In general, Loans at Risk (LaR) continued to track a downward trend that began in 2021 due to the gradual reduction of restructured loans in response to the ongoing national economic recovery.

Bank liquidity was ample in the second semester of 2021, as reflected by a ratio of liquid assets to third-party funds well above pre-pandemic levels. The ratio of liquid assets to third-party funds at the end of 2021 stood at 35.12%, far above the 20.86% recorded at the end of 2019 (Graph 1.2.8). This demonstrates the strong ability of banks to absorb risk and accelerate credit growth. Observing such conditions, Bank Indonesia plans to gradually normalise liquidity policy by raising the reserve requirements (RR) proportionally to avoid impacting the banks' ability to lend.

Bank profitability improved in the reporting period as credit expansion increased in line with the corporate and household sector recoveries. Bank profitability was reflected in return on assets (ROA) and net interest margin (NIM), which increased to 1.86% and 4.51% respectively in December 2021 from 1.59% and 4.32% in December 2020 yet remained below pre-pandemic levels (Graph 1.2.9). Bank profitability is projected to continue gaining momentum as the bank intermediation function increases, particularly in terms of disbursed loans.

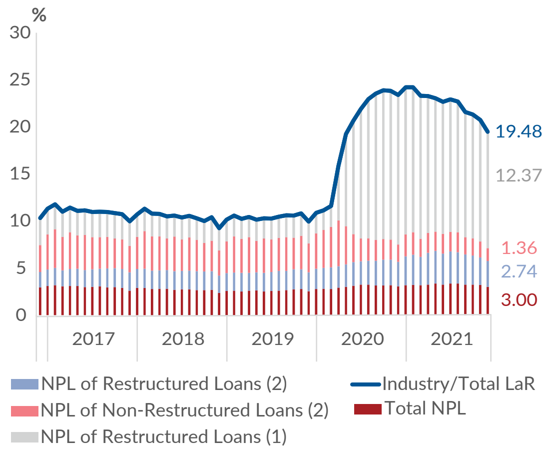
Graph 1.2.6. Growth of Bank Loans and Third-Party Funds



Source: Bank Indonesia

Though financial system stability was maintained, the scarring effect of the prolonged COVID-19 pandemic on the financial sector is significant. The scarring effect caused by the COVID-19 pandemic stems from various health aspects that have had a direct impact on restraining economic activity. On the supply side, restrictions on economic activity accompanied by supply chain disruptions have severely undermined corporate productivity. On the demand side, lower productivity has increased layoffs and furloughs, leading to lower consumption. Such an inauspicious combination has triggered significant and persistent economic losses. The recovery must be accelerated, therefore, particularly on the demand side, to restore the Indonesian economy to its pre-pandemic potential.

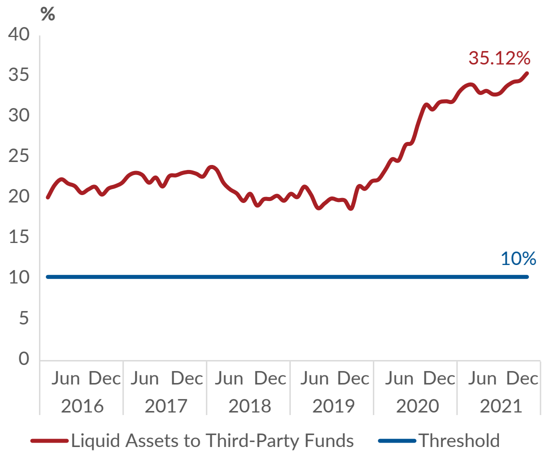
Graph 1.2.7. NPL and LaR



Source: Bank Indonesia

The scarring effect has been transmitted to the financial sector through a declining intermediation function and weaker financial system resilience caused by disruptions in the economic structure and uncertainty in the corporate sector. A suboptimal intermediation function is characterised by lower bank lending than pre-pandemic levels due to a decreasing sales trend and postponed business expansion. The scarring effect, as experienced by several corporations, poses a risk to financial

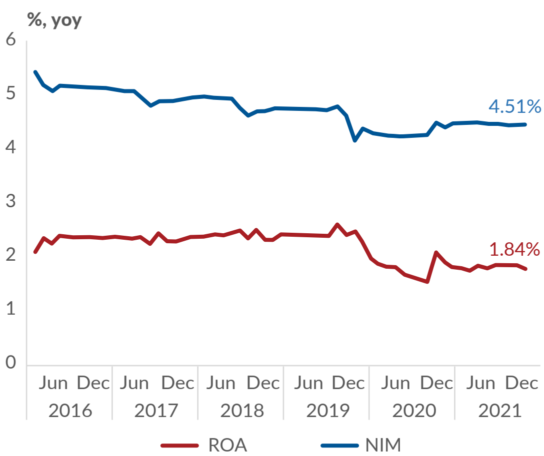
Graph 1.2.8. Liquid Assets to Third-Party Funds



Source: Bank Indonesia

system resilience through less business activity, thus impacting corporate sales, liquidity, profitability and capital. Notwithstanding, export-oriented businesses are enjoying a faster recovery than their domestic-oriented counterparts as well as businesses reliant on community mobility. Export-oriented businesses are recovering more quickly on the back of soaring commodity prices. Similar conditions are affecting corporations in subsectors not reliant on community mobility, such as information technology and communication, which have maintained performance and are recovering relatively more quickly. Meanwhile, corporations oriented towards the domestic market and impacted by community mobility are recovering more slowly and potentially experiencing the scarring effect, including construction, air transportation, accommodation and food service activities. Consequently, the

Graph 1.2.9. Bank Profitability Indicators



Source: OJK, processed

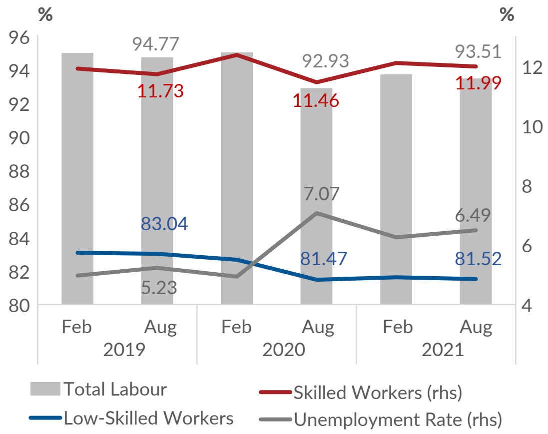
risks associated with these three subsectors must be monitored more carefully, though corporate resilience, in general, remains relatively well maintained.

The scarring effect has also impacted the household sector, particularly among informal sector and low-skilled workers. During the pandemic, numerous corporations have laid off low-skilled operators and staff, replaced by automation and technology adoption.[1] Open unemployment, as the ratio of total unemployment to total workforce, stood at 6.49% in the second semester of 2021, above the pre-pandemic level of 5.23% (Graph 1.2.10). High open unemployment is dominated by low-skilled workers, accounting for 87% (Graph 1.2.11). The percentage of low-skilled workers in the total labour market was recorded at 81.52% in the second semester of 2021, which is below the pre-pandemic level of 83.04%. Meanwhile, although the percentage of skilled workers in the second semester of 2021 was above the pre-pandemic level of 11.99%, it remains comparatively small at just 13%, thereby failing to stimulate an overall labour market recovery.

Seeking to overcome the scarring effect, financial sector authorities in Indonesia issued an Integrated Policy Package under the auspices of KSSK. The Integrated Policy Package contains five policies from different authorities. First, fiscal policy stimuli through tax incentives, supported by government spending and corporate financing. Second, monetary, macroprudential and payment system stimuli. Third, financial sector prudential policy. Fourth, deposit insurance policy. Fifth, structural reform policy. The policies were instituted in synergy to revive corporate financing and accelerate the economic recovery. In terms of implementation, the policies are well calibrated, well planned and well communicated. In addition, mapping to identify various issues in the business sector underlie the policymaking. Mapping also identified three groups of priority sectors as follows: (i) resilient sectors, namely sectors resilient to the pandemic impact, (ii) growth drivers, namely sectors impacted by the pandemic but potential growth drivers due to a faster recovery with support from the authorities, and (iii) slow starters, namely sectors most severely impacted

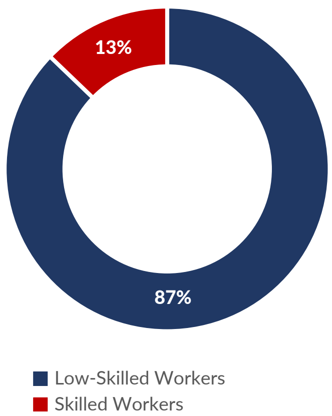
1 Real Sector Special Survey, Impact of COVID-19 on Investment and Impact of Digitalisation on Labour Utilisation, Bank Indonesia, 2021.

Graph 1.2.10. Total Labour and Unemployment



Source: Statistics Indonesia, processed

Graph 1.2.11. Labour Market Composition



Source: Statistics Indonesia, processed

by the pandemic and requiring more time to recover. Policy implementation is expected to establish such sectors as the main drivers to accelerate the economic recovery. In practice, implementation of the policy package is monitored regularly and continuously, including assessments regarding the dynamism of sectors within the groups due to a faster sectoral recovery.

1.3 Digitalisation as a Key Economic Growth Driver Moving Forward

The COVID-19 pandemic has accelerated the digitalisation trend in various sectors, particularly the financial sector, amid restrictions on mobility and physical activity. Such developments are characterised by the growing involvement and participation of BigTech in the financial sector by providing various alternative financial products and services external to the existing banking system that offer convenient, broad and fast access, thereby increasing financial inclusion. In response to financial sector digitalisation and the growing participation of BigTech, the banking industry is transforming its business models to offer better digital services by strengthening information technology infrastructure and expanding market share. In addition, digital banking transformation and efforts to enhance efficiency involve strategic collaboration with third parties, including BigTech.

Accelerating digitalisation in the financial sector can help drive the economy but can also increase financial system instability. Digitalisation can accelerate the economic recovery and expand access to retail financial services, thus contributing to economic and financial inclusion. On the other hand, however, rapid digitalisation and innovation could potentially increase instability risk in the domestic and global financial system if not supported by an adequate regulatory and supervisory framework. As an international standard-setting body for the financial sector mandated with maintaining global financial system stability, the Financial Stability Board (FSB) has assessed the opportunities and monitored potential risks to financial system stability posed by the adoption of digitalisation in the financial sector since 2019, including the development of BigTech and third-party service providers as well as cyber risk.[2]

Innovation and digitalisation in the financial sector offer benefits for the banking industry and BigTech in the form of operational cost efficiency and the expansion of services. The adoption of digitalisation allows banks to reach customers and provide financial services more broadly without physical expansion through additional branch offices that incur high operational costs. On the other hand, the provision of services by BigTech is expanding, starting with payment system services yet expanding to other areas such as financing, asset management and insurance. Traditional financial institutions, including banks, also benefit from BigTech services, such as cloud computing that provides greater efficiency, flexibility, standardisation security and operational resilience amid limited capacity for in-house development. Such financial innovation can contribute to financial system stability through the availability of diverse alternative financial services that reduce vulnerability in the event of specific shocks as well as through healthy competition between industry players to provide technology-based services. Digitalisation also promotes financial inclusion by providing convenient public access to online financial services, previously reliant on physical bank branches with limited outreach, while offering cross-border payments as well as affordable, efficient and fast remittance services. In developing economies, the adoption of digitalisation and expansion of BigTech is much more established than in advanced economies, primarily due to the low level of financial inclusion.

Though digitalisation and innovation bring numerous benefits, there are a number of financial system risks that must be monitored. At least six risks have been identified. First, BigTech activities as third-party service providers for banks are generally outside the regulatory perimeter of the current regulatory framework, making it difficult for authorities to assess and monitor the impact of risks on financial system resilience and stability. Second, BigTech could potentially trigger disintermediation at financial services institutions due to a shift in public preferences towards the financial services offered by

2 Financial Stability Board (2019), FinTech and Market Structure in Financial Services: Market Developments and Potential Financial Stability Implications.

BigTech rather than traditional financial institutions. Third, the increased risk posed by cyber incidents in the form of cyber-attacks, fraud and phishing, as well as operational disruptions in the form of system failures, which are potential sources of significant risk. Fourth, limited options and alternative third-party service providers, especially in developing economies[3], could potentially pose concentration risk and dependence among financial institutions on third-party services. Fifth, the risk of data leaks and the excessive use of consumer data raises concerns regarding the issue of consumer protection. Lastly, systemic risk could potentially increase when there is significant dependence among financial institutions on BigTech, thus requiring a strong regulatory and supervisory framework.[4] BigTech expansion into developing economies implies greater potential risk amid low levels of financial literacy, greater exploitation of personal data, potential concentration risk and higher operational risk amid infrastructure limitations.[5]

From the authority's perspective, digitalisation adoption by financial services institutions also creates new complexities and challenges regarding the adequacy of the existing supervisory and regulatory framework. In this case, financial services institutions, particularly banks, are experiencing a growing trend of collaboration with BigTech as a strategy to accelerate digitalisation, while expanding market share. For example, collaboration between banks and FinTech lending platforms in terms of expanding new loan disbursements. Such conditions create challenges for the competent authorities in terms of preventing potential regulatory arbitrage and measuring the potential impact of risks and contagion to traditional financial institutions, re-emphasising the importance of 'same activity, same risk, same regulation'. In addition, there is the pertinent issue of data availability gaps and information transparency that is required by the authorities when global BigTech provides services domestically, which must be anticipated by strengthening cross-sectoral and cross-border cooperation. BigTech activities may potentially remain undetected by current reporting obligations, particularly in terms of payments, loans, insurance and investment. It is important, therefore, for the authorities to obtain adequate data and information to support comprehensive risk assessments. The development of a policy framework must consider the principal of proportionality and be adjusted to the magnitude and scope of BigTech activity.

Economic and financial digitalisation are accelerating, supported by more reliable payment systems. This is motivated by the convenience afforded by technology to facilitate public transactions, which can now be initiated anywhere and at any time. Unsurprisingly, the value of digital economic and financial transactions in Indonesia is increasing. In 2021, the total value of e-commerce transactions stood at Rp401 trillion, up 50.98% annually. Meanwhile, the value of digital banking transactions increased 39.39% (yoy) to Rp17,901.76 trillion and the value of electronic money transactions increased 49.1% (yoy) to reach Rp305.4 trillion (Graph 1.3.1).

Innovation by industry players, including e-commerce and financial services, and the support of relevant authorities are driving rapid economic and financial digitalisation. In terms of e-commerce platforms, various innovations have occurred, from

Graph 1.3.1. e-Commerce Transaction Trends in Indonesia

Source: Bank Indonesia, processed

3 Up to two-thirds of global demand for cloud services is dominated by only four BigTech companies.

4 IMF FinTech Note/2022/002: BigTech in Financial Services: Regulatory Approaches and Architecture.

5 FSB (2020): BigTech Firms in Finance in Emerging Market and Developing Economies.

expanding the types of retailer, additional live-shopping features and the availability of various payment methods. Such developments have been welcomed by the financial services industry in terms of payment services, loans and financing as well as insurance services. From a banking perspective, digital transformation is accelerating based on the capacity and size of the bank. There are at least three common bank digitalisation strategies as follows: (i) technical digitalisation, business processes and internal bank culture, (ii) establishing a digital banking services unit, and (iii) establishing new fully digital banks. FinTech players also continue to expand the ecosystem and product innovation with the support of sharing infrastructure technology and the adoption of Open Application Programming Interface (API). Meanwhile, support from the relevant authorities continues to accelerate e-commerce growth in Indonesia based on a number of strategies, including a procurement program for MSMEs, the national movement promoting pride in Indonesian-made products, digitalisation of tax revenues through Other Perception Institutions and issuing regulations. Such innovations are in line with and complement the needs of the community. Moving forward, consumers will tend to choose the most appropriate sales channels and demand payment methods that are mobile, fast, convenient, affordable and secure. From a retailer's perspective, the use of artificial intelligence and machine learning will boost product upselling and cross-selling. Meanwhile, live-shopping features will support interaction between sellers and buyers, similar to the regular communication that is created when consumers and sellers meet offline in brick-and-mortar shops.

Bank Indonesia predicts that digital transactions will continue to grow. The value of e-commerce transactions in 2022 is predicted to reach Rp530 trillion, up 32.17% (yoy), while e-commerce transaction volume is forecast to grow 58% (yoy), reaching 4.55 million transactions. At least four factors have been identified supporting the growth of e-commerce transactions, including: (i) expansion of the e-commerce ecosystem, (ii) a shift in public retail preferences/behaviour towards online, (iii) innovation providing greater online retail convenience, and (iv) the emergence of thematic promotions, such as online shopping day, the national movement promoting pride in Indonesian-made products and so on. Bank Indonesia also expects the value and volume of electronic money transactions to increase in 2022. The value of electronic money transactions is predicted to reach Rp337 trillion, or grow 10.5% (yoy). Meanwhile, digital banking transactions in 2022 are anticipated to climb 22.11% (yoy) to Rp48,648 trillion. Such growth is driven by greater public preference and acceptance as well as the expansion of payment services.

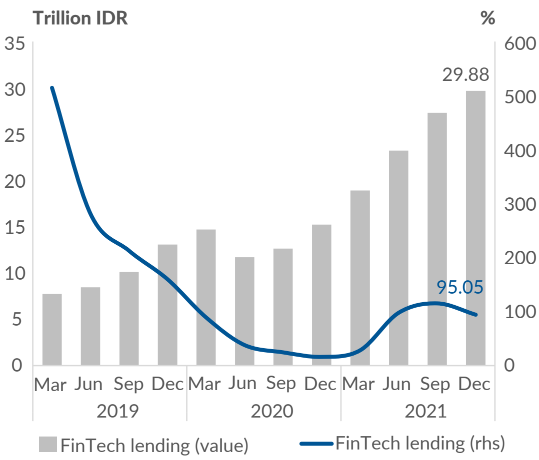
In terms of financing, the emergence of FinTech lending has potential as a key driver of economic recovery moving forward. The adoption of advanced digital technology gives FinTech lending one of its advantages, including accessibility anytime and anywhere as well as a fast and convenient loan application process. Currently, the contribution of FinTech lending to national economic financing remains small, with FinTech lending accounting for just 0.3%. A number of measures are necessary to increase disbursed financing via FinTech, including: (i) datacentre development, (ii) FinTech lending development support from the government and relevant authorities, and (iii) expansion of supporting IT infrastructure. Moving forward, financing through FinTech should continue to expand considering Indonesia's potential in terms of digital finance based on the large population and economy as well as high internet penetration. Indonesia's potential and FinTech's emergence as an alternative source of financing during the economic downturn caused by the pandemic demonstrates that FinTech lending can serve as a key driver of future economic recovery with the various benefits and advantages offered.

In 2021, FinTech lending in Indonesia grew rapidly with the trend expected to persist moving forward. According to SEA e-Conomy Research 2021, during the pandemic since the beginning of 2020 until the first semester of 2021, a total of 21 million new digital consumers have emerged. In 2021, approximately 158 million users of digital payments in Indonesia were recorded, which is expected to increase to around 221 million by 2025. There are currently around 14,000 users of FinTech lending and 16,000 users are predicted by 2025. The high number of users is consistent with the high transaction value of FinTech in Indonesia, which is expected to continue growing annually until 2025. At the end of 2021, total FinTech payment transactions are projected to reach USD54.5 billion and continue climbing to USD83.5 billion by 2025. In Indonesia, financing disbursed via FinTech lending grew rapidly by 95.05% (yoy) at the end of 2021 (Graph 1.3.2). In addition, FinTech lenders are type of financial institution that maintained positive growth throughout the pandemic in 2020 and 2021. Strong FinTech lending performance is due, amongst others, to lower private income during the pandemic, forcing members of the public to seek alternative financing options to meet their needs with more convenient and faster disbursement and administrative requirements.

In addition to FinTech lending, security crowdfunding (SCF) provides another alternative fundraising option. Financing through SCF is still limited because it is a new financial technology. The use of crowdfunding as an alternative to raising business funds was marked by the establishment of Bizhare and Santara as SCF pioneers in Indonesia in 2018. SCF is currently regulated by OJK Regulation (POJK) No. 57/POJK.04/2020 concerning Securities Crowdfunding and its amendment, namely POJK No. 16/POJK.04/2021. Departing from issuances in the Indonesia Stock Exchange (IDX), the OJK regulation caps SCF public offerings at Rp10 billion. During the second semester of 2021, SCF in Indonesia raised Rp26.56 billion, up from Rp6.17 billion in the previous semester, bringing the total in 2021 to Rp32.73 billion (Graph 1.3.3).

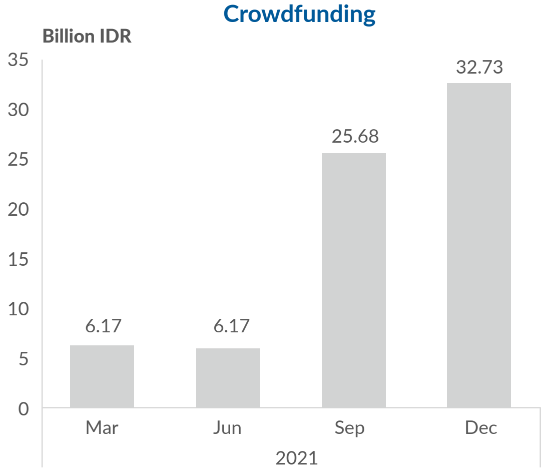
Various risks associated with FinTech lending must be monitored and mitigated. The salient risks posed by FinTech lending and faced by investors include: (i) default risk, (ii) market risk, (iii) liquidity risk, and

Graph 1.3.2. Disbursed Financing via FinTech Lending



Source: OJK, processed

Graph 1.3.3. Cumulative Total of Securities Crowdfunding



Source: OJK

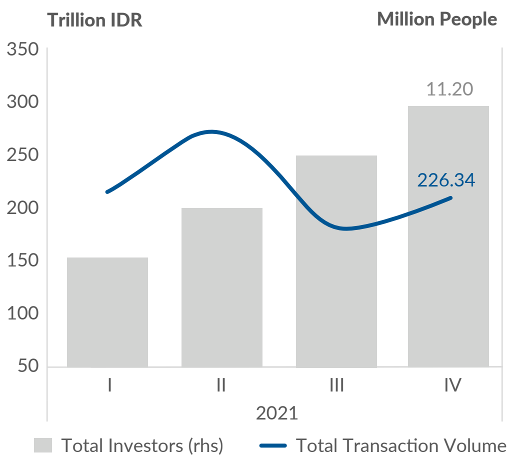
(iv) operational risk (such as fraud). Risk mitigation measures currently applied by FinTech lending include: (i) accurate credit scoring, (ii) insurance for high-risk loans, (iii) comprehensive creditworthiness appraisals of MSMEs and their financial statements, and (iv) risk disclaimers to educate prospective lenders. In addition to a comprehensive selection and analysis process for prospective lenders to mitigate the potential risk, most SCF platforms also apply auto rejection parameters to limit share price movements and reduce volatility in the secondary market.

In line with current digitalisation trends, crypto assets are developing rapidly globally and domestically. Crypto assets first emerged in 2009 with Bitcoin. Bitcoin was initially developed as an efficient payment instrument, eliminating the role of intermediaries, which became known as a cryptocurrency. Nevertheless, issues with cryptocurrencies appeared, including widespread use for illegal activities and money laundering, volatile prices and a lack of consumer protection, thus compelling authorities in several jurisdictions to ban cryptocurrencies. Such conditions combined with various technological developments and public needs evolved the use case of various cryptocurrencies into crypto assets. According to the Commodity Futures Trading Regulatory Agency (BAPPEBTI), crypto assets are defined as an intangible commodity in digital form, applying cryptography, information technology networks and distributed ledgers to regulate the creation of new units, verify and secure transactions without interference from third parties. Based on BAPPEBTI Regulation No. 7 of 2020 and No. 8 of

2021, crypto assets have become an investment tool in the commodity category that can be traded on the futures exchange under the supervision of BAPPEBTI as an alternative investment instrument sought by the public. According to data published by BAPPEBTI, the transaction value of crypto assets in Indonesia reached Rp859.4 trillion in 2021, up 1,200% (yoy) from Rp64.9 trillion in 2020. Such growth was accompanied by a commensurate increase in investor accounts from 3.8 million in February 2021 to 11.20 million at the end of 2021 (Graph 1.3.4). Despite significant growth, the transaction value of crypto assets in Indonesia remains small compared with the capital market, where transaction value totalled Rp3,302.3 trillion in 2021. This is primarily because trading crypto assets is limited to individual investors rather than institutional investors.

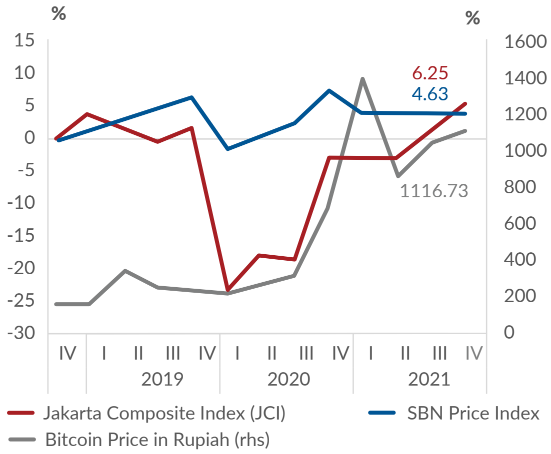
Growing public interest in crypto asset investment is driven by the potential of higher returns compared with other assets. This is indicated by the potential capital gain of trading crypto assets. For example, if an investor purchased Bitcoin using rupiah at the end of 2018 and subsequently sold the Bitcoin at the end of 2021, the capital gain would be 1,116.73% (yoy). This is significantly higher than the capital gain obtained from investing in the stock market and SBN market at 6.25% (yoy) and 4.63% (yoy) respectively (Graph 1.3.5). In addition to the higher capital gain, transaction convenience because crypto asset markets operate 24 hours per day and simple registration procedures with relatively low investment capital also contributed to the rapid development of crypto assets in Indonesia in 2021.

Graph 1.3.4. Transaction Volume and Total Investor Accounts for Crypto Assets in Indonesia



Source: Bloomberg and Investing.com, processed

Graph 1.3.5. Comparison of Capital Gain for Crypto Assets, Shares and SBN 2018-2021



Source: Bloomberg and Investing.com, processed

Crypto asset risk can be transmitted into financial system stability risk, thus demanding coordination between authorities to strike an optimal balance between innovation and risk. According to the Financial Stability Board (FSB, 2018), the main risk comes from the crypto asset itself and its market, where crypto assets are currently not recognised as legal tender, liquidity is limited, there is the risk of using debt (leverage) for investment and market risk due to price volatility as well as operational risk, such as cyber-attacks. If not well mitigated, such risks can be transmitted through four channels to financial system stability. *First*, risk from market capitalisation and the wealth effect, or the growing variety of products offered by crypto asset traders will increase investor awareness and the share of ownership by individual investors in crypto assets. Simultaneously, high price volatility and the risks posed to investors could adversely impact balance sheets and individual wealth. *Second*, the confidence effect or a lack of consumer protection regulations in Indonesia increases potential risk on the investor side, which, if allowed to materialise, could erode investor confidence in crypto asset traders in Indonesia or even the financial system in general. *Third*, financial sector exposure. Though limited, the interconnectedness of financial institutions and payment systems in the crypto asset ecosystem in Indonesia, such as margin deposit banks and payment gateways, must be monitored closely. In addition, enhanced due diligence (EDD) by BAPPEBTI does not restrict sources of funds for investors from loans, particularly from financial institutions. Therefore, the use of loans from financial institutions for crypto transactions is not monitored. This includes the potential of retreating investor confidence in financial institutions or payment systems connected to margin deposit banks and payment gateways. *Fourth*, use in payments and settlements, namely the increase in ownership of individual investors encourages the use of crypto assets as a means of payment, particularly for illicit or illegal transactions. In addition, a number of aspects must be considered when investing in crypto assets in Indonesia (refer to Box 1.1). Coordination between the authorities is required, therefore, to strike an optimal balance between risk and innovation as crypto asset trading continues to evolve in Indonesia.

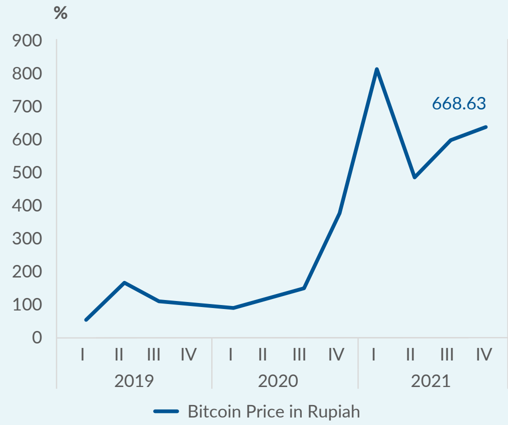
Boks 1.1

Crypto Asset Investment in Indonesia and Investment Risk

Crypto asset investment contains various risks that demand vigilance. Such risks primarily stem from high price volatility and a lack of underlying assets, credit risk for failed crypto asset investments as well as the risk of cybercrime, where criminals seek to seize ownership of crypto assets, along with fraud and deception affecting investors. The price of Bitcoin in rupiah in 2021 demonstrates the high volatility of crypto assets, ranging from Rp412.9 million per unit to Rp958.5 million per unit (Graph B1.1.1). The precipitous fall in the price of Bitcoin in the first semester of 2021 was primarily linked to just one global corporation announcing it would no longer accept Bitcoin, coupled with negative sentiment triggered by the Omnicom variant of COVID-19. In addition, downward price pressures on Bitcoin also stemmed from the global policy response to ban Bitcoin in economic activity. Consequently, investors were forced to bear significant losses if they decided to sell their Bitcoin below the purchase price. Credit risk for domestic investors can also come from failures by crypto asset traders. In December 2021, BAPPEBTI revoked the registration of one crypto asset trader and froze the operations of another trader in Indonesia who failed to comply with prevailing regulations, leading to the risk of loss or delays for investors seeking to withdraw funds from their crypto wallets.

Globally, the value of crypto asset related crimes reached USD14 billion in 2021, up significantly from USD7.8 billion in 2020. Credit risk and cybercrime in 2021, among others, occurred in the Squid Game Token scam, where the creator of the crypto asset used an algorithm to prevent investors from selling their tokens, with the creator unable to be identified or held accountable.

Graph B1.1.1. Bitcoin Price Developments in Rupiah

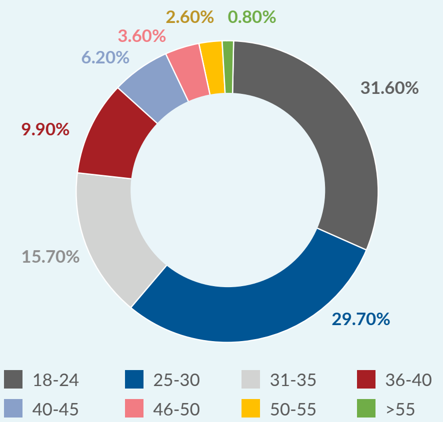


Source: Bloomberg and Investing.com, processed

Public literacy concerning the potential risks of crypto asset investment must be increased. The public must be vigilant and fully understand the characteristics of the risks and potential losses associated with investing in crypto assets. Risk mitigation efforts should primarily target millennials (18–35-year-olds) as well as new investors to prevent them from using funds required for basic necessities to invest in crypto assets. The millennial generation dominates investor accounts in the domestic market, accounting for 77% (Graph B1.1.2) with an average transaction value of Rp2-3 million. In addition, 17.9% of investor accounts are students without a fixed source of income.

The various risks inherent to crypto asset trading must be monitored carefully throughout 2022 given the high uncertainty of underlying assets, regulatory gaps and innovation in terms of using crypto assets for cybercrime. Such structural vulnerabilities, coupled with global economic fragilities caused by intense inflationary pressures, uncertainty surrounding the US

Graph B1.1.2. Composition of Crypto Asset Investors in Indonesia by Age



Source: BAPPEBTI

Federal Reserve's policy direction and escalating global geopolitical tensions will exacerbate crypto asset price volatility, thereby increasing exposure to financial losses borne by investors.

Crypto asset development and the associated risks are receiving global attention, demanding effective regulation and supervision. In the communiqué issued by the G20 Finance Ministers and Central Bank Governors at the meeting on 17-18th February 2022, attendees agreed to continue exploring the benefits and risks of financial sector innovation on financial system stability, including potential regulatory gaps concerning crypto assets. Without effective regulation and supervision, crypto asset transactions and linkages with the conventional financial system could potentially become a new source of vulnerability and global financial system instability.

In accordance with the Currency Act (No. 7 of 2011), Bank Indonesia does not recognise the use of crypto assets as legal tender in the territory of the Republic of Indonesia. Furthermore, through PBI No. 18/40/PBI92016 concerning Payment Transaction Processing and PBI No. 19/12/PBI/2017 concerning Financial Technology, Bank Indonesia prohibits payment system service providers and financial technology providers in Indonesia, including banks and non-bank financial institutions, from processing payment transactions using virtual currencies. In synergy with other financial sector authorities, Bank Indonesia will continue to monitor crypto asset developments and innovation to safeguard domestic financial system stability.

Chapter 02

FINANCIAL SYSTEM STABILITY MAINTAINED

Economic financing continued to improve in the second semester of 2021 in line with macroeconomic conditions. Bank lending at the end of 2021 maintained positive performance, outpacing conditions in the first half of the year across all credit segments and nearly all economic sectors. The banking industry was more inclined to disburse new loans as risk perception improved given contained credit risk. Financing from the non-bank financial industry also improved, as reflected by a shallower financing contraction experienced by finance companies, coupled with stronger growth of FinTech lending and venture capital. Moreover, a bump in the value of initial public offerings (IPO) and rights issues at the end of 2021 pointed to increasing financing through the capital market.

Corporate and household sector recoveries on the back of increasing community activity stimulated intermediation. Growing demand and higher international commodity prices also accelerated the corporate recovery, particularly among corporations serving the export market. This was accompanied by greater labour absorption, which boosted household income and consumption. Household sector gains, which were strongest in the middle-upper segment, together with various government incentives and looser policies maintained by the competent authorities also increased household demand for credit.

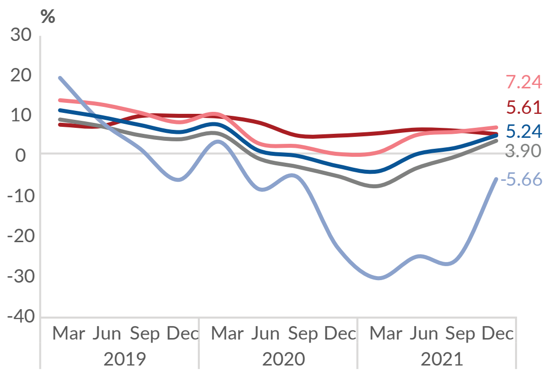
Financial system resilience was maintained despite the various challenges. Corporate resilience was supported, amongst others, by improving repayment capacity and liquidity conditions in the second semester of 2021. Meanwhile, household resilience was also reflected in greater repayment capacity given higher household income. Consistent with improving repayment capacity in the corporate and household sectors, credit risk subsided in the banking industry. Despite remaining above pre-pandemic levels recorded in 2019, the NPL ratio and LaR in the banking industry were lower at the end of 2021 compared with conditions in 2020. Lower credit risk was also evidenced by the decreasing trend of restructured loans across all segments, indicating early signs of recovering repayment capacity among borrowers impacted by the pandemic. In general, banking industry resilience was supported by solid capital and liquidity, with capital and liquidity ratios at the end of 2021 exceeding conditions in the first semester of 2021 and the end of 2020. Stress tests revealed that banking industry resilience could be maintained in the event of deteriorating macroeconomic conditions. In terms of the non-bank financial industry, the resilience of finance companies, pawnbrokers, Indonesia Eximbank and venture capital firms was supported by a lower ratio of non-performing financing (NPF) and solid capital base.

Concerning economic and financial inclusion, MSME performance has improved, thereby accelerating MSME loan growth, with credit risk contained at the end of 2021. Stronger credit growth was also influenced by looser MSME lending standards in 2021 compared with conditions in 2020 as risk perception in the banking industry eased in line with contained MSME credit risk. MSME loan growth also accelerated in response to government and regulator efforts to optimise People's Business Loan (KUR) disbursements, while rapid growth of digital lending has increased bank credit inclusiveness at a micro level.

2.1 Intermediation Recovery Driven by Banking Industry on Supply and Demand Sides

Growth of loans disbursed by the banking industry accelerated in 2021 as macroeconomic conditions improved and with the support of policy synergy. Bank lending moved deeper into positive territory at 5.24% (yoy) by the end of 2021, up from 0.59% (yoy) in the first semester of the year. Credit growth, therefore, was consistent with the projection for 2021 in the 4-6% range. In general, growth of disbursed loans was driven by state-owned banks, national private commercial banks and regional government banks, while lending by foreign bank branches experienced a shallower contraction (Graph 2.1.1).

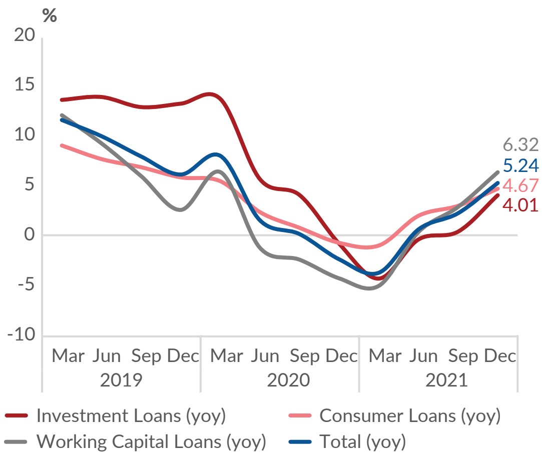
Graph 2.1.1. Loan Growth by Bank Group



Source: Bank Indonesia

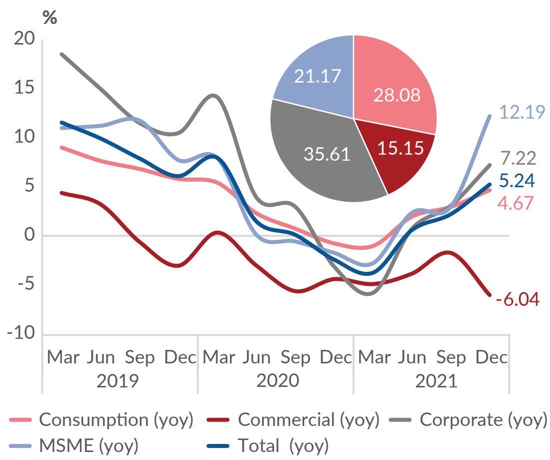
Broad-based gains were reported by the banking industry in 2021 across all loan types. Working capital loans, consumer loans and investment loans posted 6.32% (yoy), 4.67% (yoy) and 4.01% (yoy) growth respectively (Graph 2.1.2). By segment, consumer loans, corporate loans and MSME loans gained upward momentum (Graph 2.1.3), indicating stronger real sector activity despite economic recovery conditions impacted by the pandemic. By sector, all economic sectors recorded positive credit growth, except the electricity, water and gas supply sector (Table 2.1.1). Agriculture and mining led the sectoral gains on the back of rising international commodity prices in the fourth quarter of 2021.

Graph 2.1.2. Loan Growth by Loan Type



Source: Bank Indonesia

Graph 2.1.3. Loan Growth by Segment*



Source: Bank Indonesia

* Notes:

Corporate Loans > Rp100 billion, excluding MSME and consumer loans

Commercial Loans < Rp100 billion, excluding MSME and consumer loans

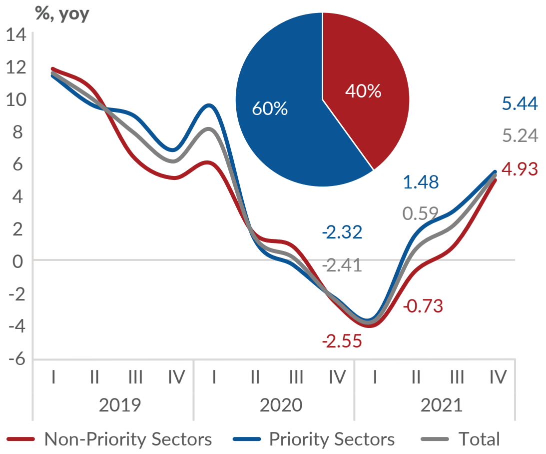
Table 2.1.1. Bank Lending by Economic Sector

Economic Sector	Growth (%. yoy)			Share (%)	Contribution yoy (%)
	Dec-19	Dec-20	Dec-21	Dec-21	Dec-21
Agriculture	4.63	4.58	8.11	7.53	0.59
Mining	-2.61	-7.22	23.42	2.67	0.53
Manufacturing	3.63	-4.09	6.43	16.49	1.05
Electricity. Gas and Water Supply	16.49	-14.82	-5.44	2.77	-0.17
Construction	14.61	3.92	1.04	6.59	0.07
Trade	3.73	-5.16	3.48	18.98	0.67
Transportation	13.63	7.80	15.05	5.31	0.73
Corporate Services	5.37	-8.26	2.89	8.49	0.25
Social Services	14.01	1.62	6.74	3.06	0.20
Others	5.80	-0.74	4.60	28.10	1.30
Total	**6.08**	**-2.41**	**5.24**	**100**	**5.24**

Source : Bank Indonesia

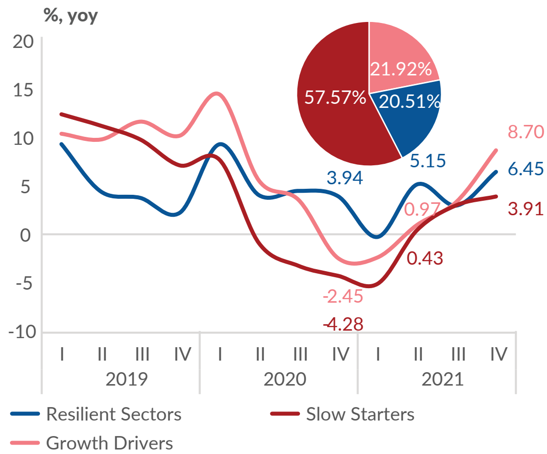
Improving growth of loans disbursed by the banking industry in 2021 primarily stemmed from the priority subsectors. Loans allocated to priority subsectors expanded 5.44% (yoy) in 2021 (Graph 2.1.4). Improvements in priority subsectors were recorded across all clusters, namely resilient sectors[6] (6.45% yoy), growth drivers[7] (8.70% yoy) and slow starters[8] (3.91% yoy) (Graph 2.1.5). This is consistent with greater loan appetite in the banking industry for the priority subsectors, as reflected by looser Lending Requirements (LR) (minimum score of 3) for most priority subsectors in line with contained credit risk at the end of 2021 (Table 2.1.2).

Graph 2.1.4. Lending to Priority and Non-Priority Subsectors



Source: Bank Indonesia

Graph 2.1.5. Lending to Priority Subsectors by Cluster



Source: Bank Indonesia

6 Classification of priority economic sectors by KSSK in January 2021.

7 Ibid.

8 Ibid.

Table 2.1.2. Lending Requirements for Priority Subsectors

Cluster	Subsector	Growth of Outstanding Loans (%,yoy)	Lending Rate (%)		Loan to Value Ratio (%)		Loan Duration (Month)		LR SCORE	NPL (%)		Credit Growth (%,yoy)	
		2021	2020	2021	2020	2021	2020	2021		2020	2021	2020	2021
Resilient	Horticulture	66.68	9.20	9.09	35.30	21.68	27	34	3	0.90	1.16	33.21	68.10
	Chemicals and Pharmaceuticals	6.88	7.83	6.84	58.94	58.75	16	17	4	1.60	1.16	-8.82	-0.46
	Food and Beverages	6.82	7.93	7.29	127.70	61.02	28	27	3	1.93	1.53	14.27	10.31
	Forestry and Logging	2.06	9.90	9.05	76.17	115.18	24	27	3	1.31	1.09	-0.21	-5.14
	Metalliferous Ore Mining	21.27	8.85	7.37	24.97	21.97	26	27	4	0.16	0.14	0.77	10.29
	Plantations	3.76	9.29	8.55	121.89	155.42	36	43	3	1.88	1.64	1.57	3.49
Growth Drivers	Non-Mineral Mining	-7.28	8.22	8.07	80.30	128.37	25	22	0	2.39	2.07	-8.10	-9.52
	Metal and Electronics Industry	0.11	8.48	7.99	41.87	34.44	21	22	3	8.07	5.83	-12.90	6.42
	Wood and Furniture Industry	10.87	9.43	8.86	140.30	67.60	29	29	3	9.80	10.17	-3.80	3.08
	Industri Kulit dan Alas Kaki	12.64	9.59	8.50	88.64	29.22	26	24	3	3.50	3.56	1.81	16.43
	Base Metals Industry	4.67	7.25	7.00	73.07	119.10	22	21	1	5.49	3.00	-2.52	15.21
	Machinery and Equipment Industry	3.32	8.88	8.27	137.33	112.40	26	25	3	12.04	10.20	6.26	5.34
	Textiles Industry	-1.46	8.32	8.12	63.63	66.71	25	26	1	11.16	22.80	-0.87	0.96
	Information and Telecommunications	29.85	6.76	6.12	44.06	50.69	23	24	3	1.95	1.37	7.03	36.14
	Agricultural Services	0.40	10.27	9.67	57.55	52.86	40	44	4	4.24	1.26	-31.80	6.25
	Water Supply	-4.00	10.02	9.21	67.49	76.93	36	37	2	0.43	0.44	-7.52	-6.48
	Tobacco Processing	5.94	5.69	4.72	23.02	19.98	12	10	3	0.05	0.03	-53.56	3.48
	Livestock and Fishing	17.93	8.93	8.40	76.37	44.76	31	35	4	3.50	3.13	9.21	22.20
	Real Estate	-0.08	8.79	8.19	129.33	135.28	34	35	2	2.37	2.11	2.16	-1.51
	Food Crops	29.01	9.37	8.48	59.64	27.84	26	31	4	2.92	1.48	25.74	29.71
Slow Starters	Public Administration	35.39	5.84	4.76	0.10	0.06	16	20	4	0.00	0.00	-20.91	22.50
	Land Transportation	-0.21	10.17	10.00	153.35	88.79	32	33	2	2.55	2.90	-3.75	0.75
	Rail Transportation	-13.19	7.59	6.41	18.14	39.12	36	35	1	0.09	0.13	48.42	8.23
	Insurance and Pension Funds	40.91	8.06	7.21	4.36	3.28	59	18	3	1.85	0.61	-29.88	201.46
	Accommodation and Food Service Activities	2.68	8.40	8.31	283.18	133.41	41	45	3	5.39	6.34	5.77	3.92
	Transportation Equipment Industry	-3.48	8.33	7.73	38.79	39.85	16	22	2	1.26	4.00	2.70	4.32
	Rubber and Plastic Industry	6.46	8.38	7.99	85.15	62.90	17	17	3	7.29	8.78	-8.60	8.58
	Health Services	4.57	9.44	9.38	136.68	76.86	41	47	3	1.37	0.57	-5.45	1.42
	Education Services	1.30	10.15	12.48	59.12	108.29	42	48	2	1.80	1.51	-4.23	2.92
	Financial Services	15.72	6.94	5.95	31.18	31.51	20	18	2	0.02	0.10	-20.92	-5.41
	Financial Intermediary Services	8.48	8.27	6.93	106.70	34.10	29	29	3	0.56	1.42	-12.48	4.78
	Construction	-3.92	9.03	8.09	188.69	144.17	17	18	3	3.45	3.62	3.92	1.04
	Logistics	-5.07	9.25	8.72	286.25	74.52	25	24	1	1.44	1.70	-5.23	-4.50
	Wholesale and Retail Trade	4.27	10.27	10.07	81.64	48.89	30	31	3	4.43	4.08	-6.35	3.42
	Coal and Lignite Mining	15.59	9.78	9.57	65.47	100.35	19	20	2	13.60	8.04	-4.78	28.58
	Air Transportation	13.98	7.59	7.56	166.73	152.58	14	20	3	0.09	0.36	10.03	16.32

Notes: Classification of priority economic sectors by KSSK in January 2021

Plafon	Lending Rate	Loan to Value Ratio	Loan Duration
Positif	Δ 2020 - 2021 > 0,53%/ 0,53% = Δ SB Kredit Agregat	2021 < 2020	2021 > 2020

Lending Requirement Score

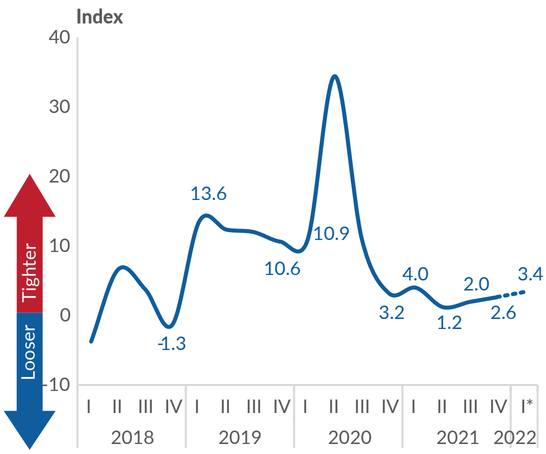
0	1	2	3	4

Looser

Source : Bank Indonesia

Improving risk perception in the banking industry coupled with recovering macroeconomic conditions helped to revive the bank intermediation function. The banking industry loosened lending standards, as reflected by a comparatively lower Lending Standards Index than in 2020 (Graph 2.1.6). Notwithstanding, the extension of mobility restrictions at the beginning of the second semester of 2021 prompted a more selective banking industry when disbursing loans, as confirmed by a slightly tighter Lending Standards Index in the latter half of 2021 compared with conditions in the first semester of 2021, yet not as tight as in the previous year.

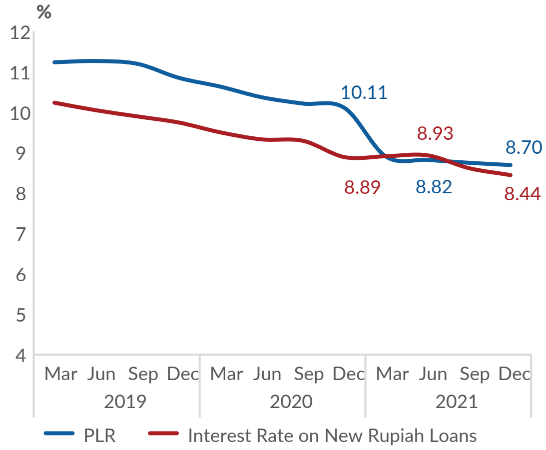
Graph 2.1.6. Lending Standards Index



Source: Bank Indonesia, *) Projected

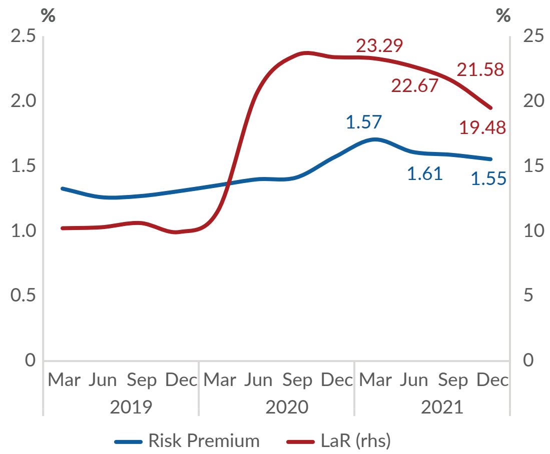
Lower lending rates in response to a lower risk premium also pointed to improving risk perception in the banking industry in 2021. The prime lending rate (PLR) stood at 8.70% at the end of 2021, maintaining the downward trend from the first semester of 2021 at 8.82% and the end of 2020 at 10.11% (Graph 2.1.7). Lending rate reductions were consistent with a lower risk premium at the end of the second semester of 2021 to 1.55% from 1.61% in the first semester of 2021 and 1.57% at the end of 2020. The lower risk premium was also consistent with LaR[9], which fell to 19.48% in December 2021 from 22.67% in the second semester of 2021 and 23.29% in the same period of the previous year (Graph 2.1.8).

Graph 2.1.7. Prime Lending Rate and Interest Rate on New Loans



Source: OJK and Bank Indonesia

Graph 2.1.8. Risk Perception in Banking Industry



Source: OJK and Bank Indonesia

Stronger credit growth in 2021 was also supported by ample availability of third-party funds. Growth of third-party funds hit 12.21% (yoy) in the second semester of 2021, accelerating from 11.28% (yoy) in the first semester of 2021 and 11.11% (yoy) at the end of 2020. Demand deposits were the main driver of third-party fund growth given the wait and see attitude of the corporate sector in terms of long-term investment realisation (Graph 2.1.9). Such conditions were also confirmed by growth of third-party funds among corporate customers at 7.25% (yoy) (Table 2.1.3).

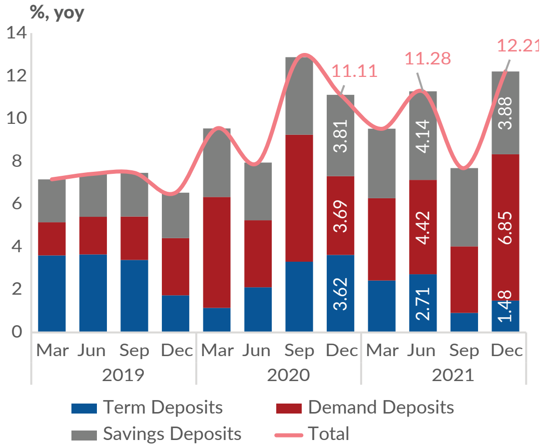
9 Loans at Risk (LaR) include restructured outstanding loans with a collectability score of 1, outstanding loans with a collectability score of 2 as well as non-performing loans (NPL).

Table 2.1.3. Contribution of Third-Party Funds by Customer Group

Customer Group	Value (RP, trillions)		Third-Party Funds (%, yoy)		Share (%)		Contribution (%, yoy)	
	2020	2021	2020	2021	2020	2021	2020	2021
Non-Residents	52	73	19.69	39.10	0.78	0.97	0.14	0.31
Government State-Owned Enterprises	420	511	12.93	21.67	6.30	6.83	0.80	1.37
Government Non-State-Owned Enterprises	376	412	1.09	9.52	5.65	5.51	0.07	0.54
individual	3,583	3,733	10.58	4.18	53.75	49.91	5.72	2.25
Private NBFI	291	325	14.31	11.53	4.37	4.34	0.61	0.50
Corporate	1,943	2,426	13.21	24.88	29.14	32.43	3.78	7.25
Total	**6,665**	**7,479**	**11.11**	**12.21**	**100**	**100**	**11.11**	**12.21**

Source : Bank Indonesia

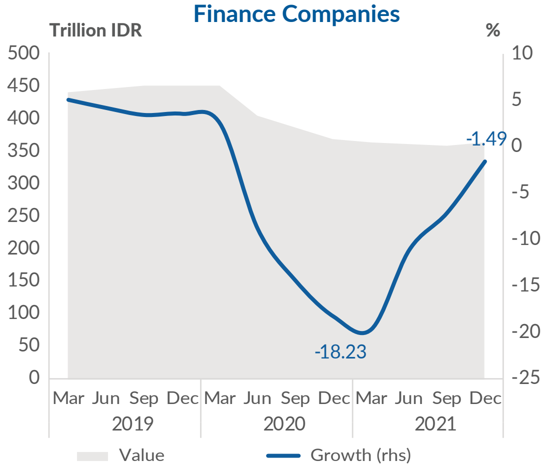
Graph 2.1.9. Growth of Third-Party Funds



Source: Bank Indonesia

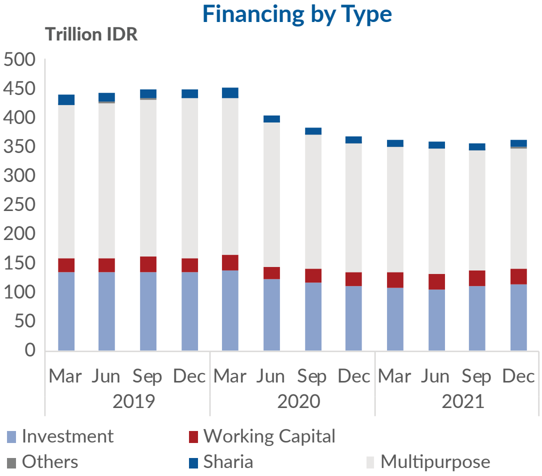
In terms of the nonbank financial industry, improvements in the supply of financing to the real sector by finance companies was also driven by a relaxation of automotive sector policy. Disbursed financing from finance companies at the end of 2021 recorded a shallower 1.49% (yoy) contraction after declining 18.23% (yoy) at the end of 2020 (Graph 2.1.10). The sales tax exemption on luxury goods (PPnBM) for new cars, effective from March 2021, was a strong incentive to increase sales of new cars, which revived financing disbursed by finance companies considering that more than 40% of disbursed financing from finance companies is used to purchase new motor vehicles. Disbursed financing from finance companies is projected to continue improving in 2022, partially driven by government plans to maintain the PPnBM for Low-Cost Green Cars (LCGC) with a retail value of less than Rp200 million and non-LCGC costing less than Rp250 million. Finance company financing remains dominated by multipurpose financing and investment financing (Graph 2.1.11), most of which is allocated to wholesale and retail trade.

Graph 2.1.10. Disbursed Financing Growth at Finance Companies



Source: OJK

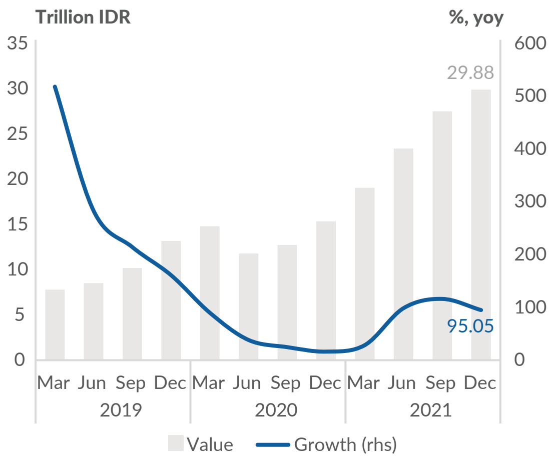
Graph 2.1.11. Composition of Finance Company Financing by Type



Source: OJK

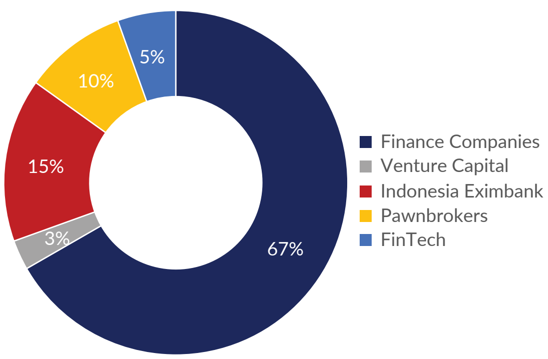
Growth of alternative financing, such as FinTech lending and venture capital, has recovered faster than bank loans. Lower income during the pandemic compelled individuals to seek alternative financing to meet their needs with looser requirements and faster disbursement than applying for a bank loan. Since the first quarter of 2021, FinTech lending has accelerated (Graph 2.1.12), while loans disbursed by the banking industry slumped into a deeper contraction compared with conditions in the fourth quarter of 2020. FinTech lending recorded 95.05% (yoy) growth in the fourth quarter of 2021. Despite significant growth, the market share of FinTech lending remains small at just 5% of NBFI financing (Graph 2.1.13). Similar to FinTech lending, business financing via digital platforms, such as venture capital in e-commerce businesses, FinTech, EduTech and HealthTech, recovered more quickly in the first quarter of 2021, with growth at the end of 2021 recorded at 21.45% (yoy) (Graph 2.1.14).

Graph 2.1.12. Growth of FinTech Lending



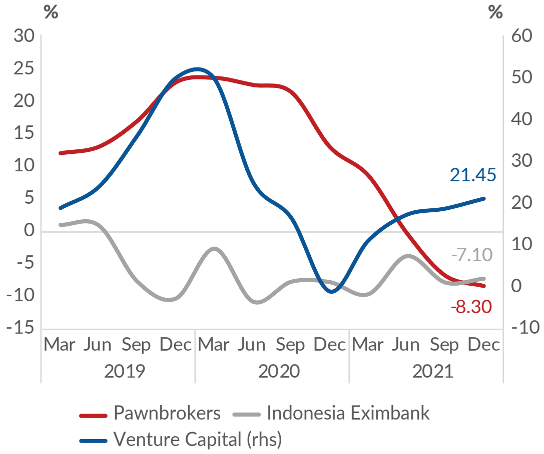
Source: OJK

Graph 2.1.13. Composition of NBFI Financing



Source: OJK

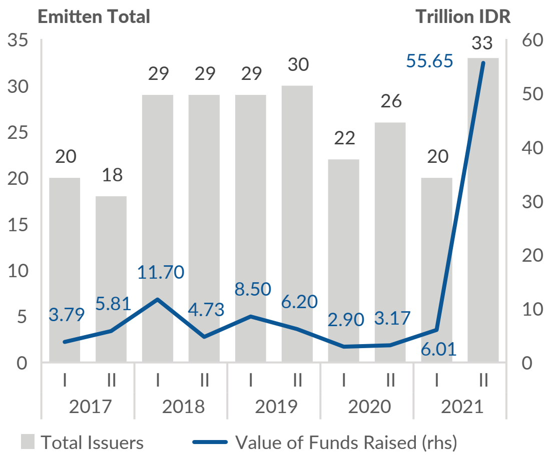
Graph 2.1.14. Growth of NBFI Financing



Source: OJK; November 2021 data used for pawnbrokers

Financing via the capital market has also improved through initial public offerings (IPO) and rights issues. Fundraising through IPOs and rights issues in 2021 hit a five-year high (Graph 2.1.15). In the second semester of 2021, a total of 33 issuers initiated IPOs with a value of Rp55.65 trillion, improving from 20 issuers with a value of Rp6.01 trillion in the first half of the year. The high value of IPOs in 2021 primarily stemmed from just two corporations, namely Bukalapak (Rp 21.9 trillion) and Dyamitra Telekomunikasi (Rp18.3 trillion). In 2022, the strong trend of IPOs is expected to persist in line with high demand for funding for product development investment.

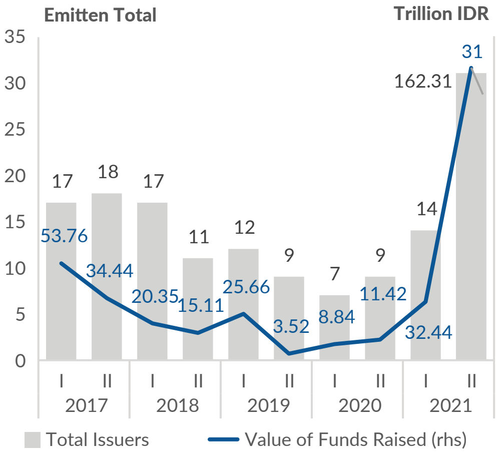
Graph 2.1.15. IPO Performance



Source: Capital Market Statistics, OJK, processed

The performance of rights issues also increased in the second semester of 2021 compared with conditions in the first half of the year (Graph 2.1.16). In total, 31 companies initiated rights issues with a value of Rp162.3 trillion in the second half of 2021, increasing from 14 issuers with a value of Rp32.4 trillion in the first semester of 2021. Rights issues in 2021 were dominated by the banking sector in the context of increasing core capital.

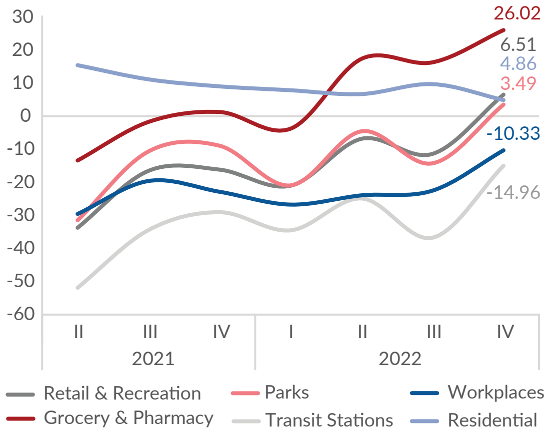
Graph 2.1.16. Rights Issue Performance



Source: OJK, processed

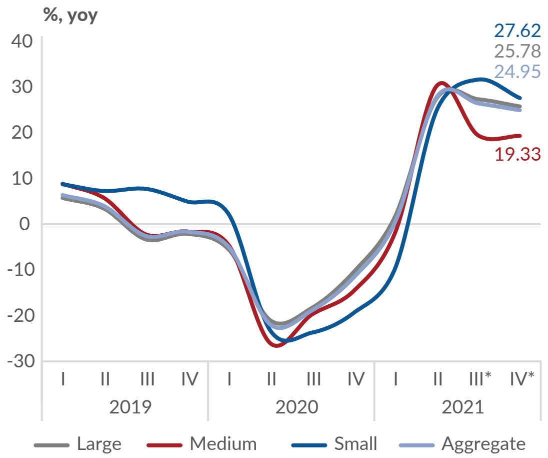
On the demand side, relatively stable corporate performance in response to greater mobility and higher commodity prices in the latter half of the year helped revive the intermediation function. The Google Mobility Index for non-residential areas, including retail and recreation, posted significant gains, particularly from September-December 2021 (Graph 2.1.17). Greater public mobility contributed to higher corporate sales, growing 24.95% (yoy) as an aggregate at the end of 2021. Moderation in the second half of 2021 compared with conditions in the first half of the year was primarily due to the base effect of higher sales in the second semester of 2020 compared with the first semester of 2020. At the end of 2021, small enterprises began to close the sales gap after recovering more slowly than medium and large corporations in the first semester of 2021 (Graph 2.1.18)[10].

Graph 2.1.17. Google Mobility Index



Source : Google, processed

Graph 2.1.18. Corporate Sales Performance



Source : Bloomberg, processed; *) Preliminary data

Corporations serving the export market have recovered more quickly than domestic oriented corporations[11]. Stronger sales performance recorded by exporters (Graph 2.1.19) was primarily driven by a global demand recovery as social mobility and economic activity returned to normal in Indonesia's key trading partner countries, coupled with rising international commodity prices, including crude palm oil (CPO) and coal (Graph 2.1.20). The manufacturing industry, trade and mining were the main contributors to the corporate sales recovery in the second semester of 2021, while the agricultural sector has maintained positive growth throughout the pandemic (Table 2.1.4). The manufacturing industry and trade sector have recovered in response to increasing mobility and business activity. Meanwhile, solid

10 The classification of large, medium and small enterprises is based on corporate asset share in 2019. Corporations with assets above the 75th percentile constitute large corporations, with medium enterprises in the 50-75th percentile and small enterprises below the 50th percentile.

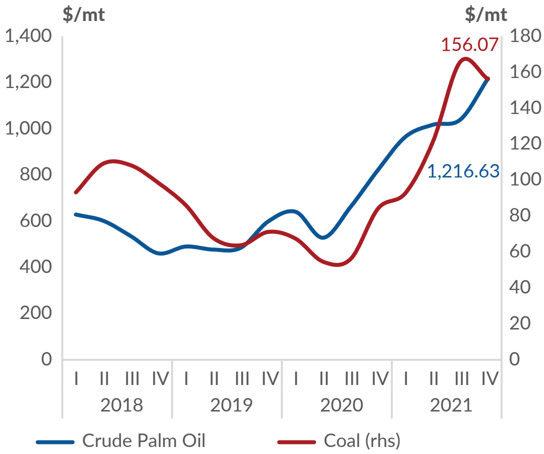
11 Exporters are corporations engaged in export activity during the 2019-2020 period, while domestic-oriented corporations are non-exporters.

sales growth in the agricultural and mining sectors was in line with growing demand and higher export commodity prices, particularly CPO and coal.

Graph 2.1.19. Sales Growth by Market Orientation

Source : Bloomberg, processed; *) Preliminary data

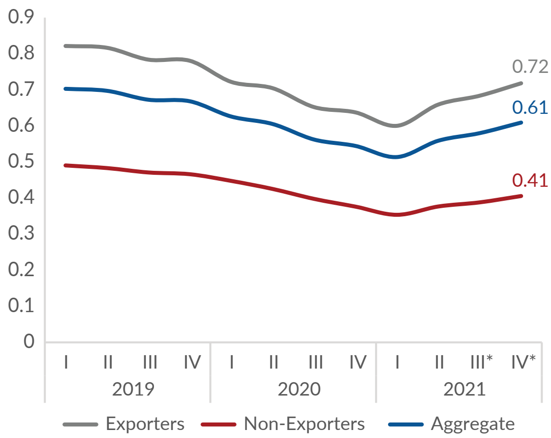
Graph 2.1.20. International Prices of Crude Palm Oil and Coal



Source: Bloomberg & World Bank, processed

Stronger sales improved corporate efficiency and profitability ratios. The Asset Turnover (ATO) ratio, as a measure of corporate efficiency, has maintained an improving trend since the first quarter of 2021 after tracking a persistent decline due to a significant sales slump. In the fourth quarter of 2021, corporate ATO stood at 0.61, implying that corporations could replace 61% of total assets within one year from sales activity (Graph 2.1.21). Mirroring that trend, profitability ratios have continued to show signs of improvement. In the second semester of 2021, the average Return on Equity (ROE) for shareholders and corporate investors increased to 9.41% from 4.70% in the first semester of 2021 (Graph 2.1.22).

Graph 2.1.21. Asset Turnover



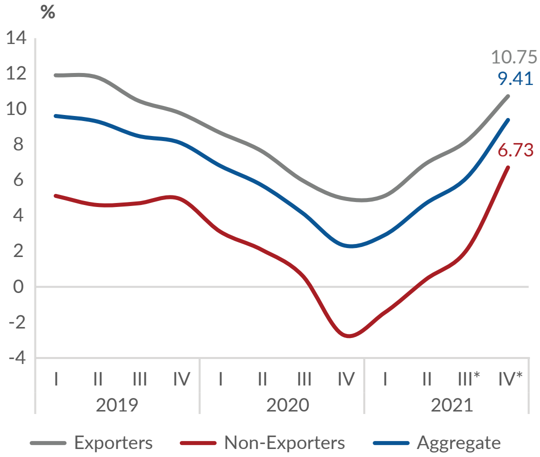
Source : Bloomberg, processed; *) Preliminary data

Table 2.1.4. Corporate Sales Growth by Sector

Sector	(%, yoy)													
	2019				2020				2021				Sectoral Growth Contribution	
	I	II	III	IV	I	II	III	IV	I	II	III*	IV*	III*	IV*
Agriculture	5.75	-8.36	-12.31	0.73	7.44	13.87	2.03	19.11	19.24	32.73	69.64	41.24	2.78	1.95
Mining	9.51	16.36	-7.12	-3.36	-3.12	-21.72	-24.32	-17.28	0.29	32.05	63.22	72.48	6.89	7.57
Manufacturing	6.68	4.20	-2.97	-2.32	-5.26	-19.65	-12.65	-5.11	6.35	29.90	21.66	18.28	10.12	8.44
Electricity, Gas and Water Supply	-1.26	-1.97	2.01	-0.24	-0.88	-29.67	-29.10	-24.73	-13.36	18.66	14.12	10.43	0.27	0.19
Construction	-8.80	-15.58	-13.69	-12.42	-22.19	-37.92	-35.75	-30.15	-15.10	19.58	19.74	35.54	1.15	2.49
Trade	8.97	2.72	2.76	1.24	-3.02	-27.72	-25.64	-20.39	-6.56	29.85	21.96	19.08	3.34	2.83
Transportation	9.68	9.38	2.52	2.46	-4.00	-22.01	-23.41	-12.72	-10.53	13.44	11.14	10.12	1.11	0.99
Corporate Services	9.80	19.12	15.06	18.53	3.67	-17.27	-22.04	-21.76	-5.62	14.85	14.45	7.08	0.32	0.15
Social Services	14.79	10.40	8.29	8.45	-1.66	-20.06	-0.21	7.12	16.62	43.99	14.12	9.98	0.45	0.30
Aggregate	**6.38**	**3.98**	**-2.52**	**-1.60**	**-4.97**	**-21.92**	**-18.82**	**-11.64**	**0.49**	**27.83**	**26.45**	**24.95**	**26.45**	**24.95**

Source: Bloomberg, *processed

Graph 2.1.22. Return on Equity



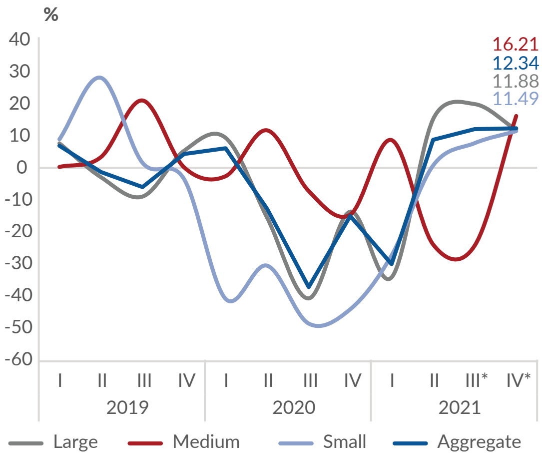
Source : Bloomberg, processed; *) Preliminary data

Graph 2.1.24. Capital Expenditure Growth by Market Orientation

Source : Bloomberg, processed; *) Preliminary data

The corporate sector has begun to realise long-term investment. This was demonstrated by increasing capital expenditure (capex) growth throughout 2021, from 8.79% (yoy) in the second quarter of 2021 to 12.34% (yoy) in the fourth quarter of 2021 (Graph 2.1.24). All corporate groups contributed to faster capex growth based on asset size and sales orientation (Graph 2.1.23 and Graph 2.1.24) in response to the promising demand outlook. Moving forward, the improving trends of corporate sales and capex growth are expected to endure, including corporations serving the export market, in line with the promising macroeconomic outlook.

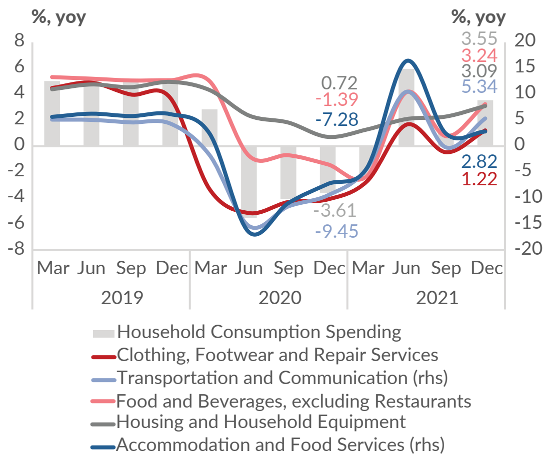
Graph 2.1.23. Capital Expenditure Growth by Asset Size



Source : Bloomberg, processed; *) Preliminary data

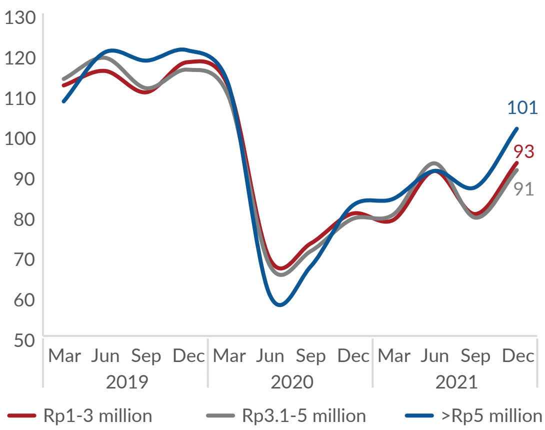
The ongoing corporate recovery is expected to have a knock-on effect on household consumption, supported by the upper middle segment. Household consumption grew 3.55% (yoy) in the fourth quarter of 2021 after contracting 3.61% (yoy) in the fourth quarter of 2020. Household consumption was also driven by transportation and communication (5.34% yoy) at the end of the second semester of 2021 (Graph 2.1.25) after the Government removed emergency community activity restrictions (PPKM) at the end of July 2021. Consumption improved throughout 2021, primarily on the back of the upper middle segment (spending more than Rp5 million per month), as reflected by conditions for buying durable goods at the end of the second semester of 2021 (Graph 2.1.26).

Graph 2.1.25. Household Consumption Growth by Sector



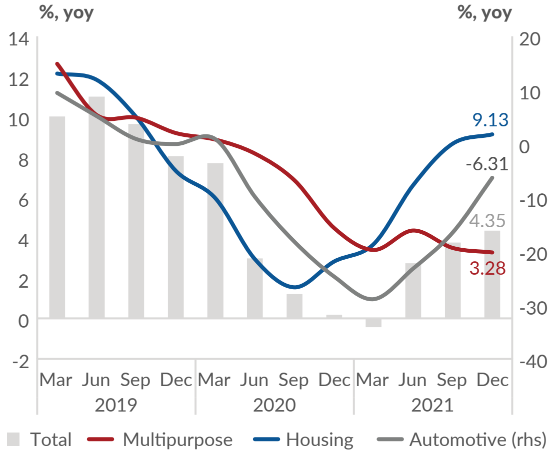
Source : Statistics Indonesia

Graph 2.1.26. Conditions for Buying Durable Goods Index by Spending Bracket



Source : Bank Indonesia

Graph 2.1.27. Consumer Loan Growth

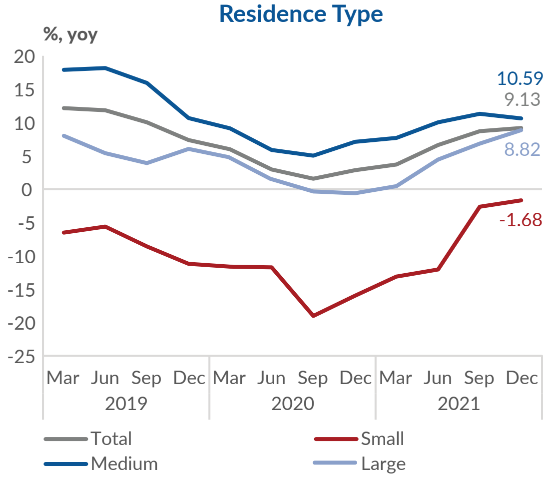


Source : Bank Indonesia

Recovering household consumption, fiscal stimuli and the accommodative policy stance of Bank Indonesia boosted household demand for loans. Household demand for loans recovered gradually, as indicated by 4.35% (yoy) growth of consumer loans in the fourth quarter of 2021 after experiencing a contraction in the first quarter of the year (Graph 2.1.27). Growth of consumer loans in the household segment primarily stemmed from housing loans and automotive loans. Lower lending rates, looser Loan/Financing-to-Value (LTV/FTV) ratios and government-borne VAT revived housing loan growth, reaching 9.13% (yoy) at the end of 2021. Housing loan growth was mainly elevated by upper middle-income earners, indicated by purchases of houses larger than $21m^2$ as a proxy. This was also supported by the financial conditions of the upper segment, which recovered more quickly from the impact of COVID-19 than other segments. Housing loans for the purchase of large residences, exceeding $70m^2$, grew 8.82% (yoy) in the second semester of 2021, while loans for the purchase of small houses (>21 m^2) have contracted since 2019 despite early signs of improvement since the second semester of 2020 (Graph 2.1.28).

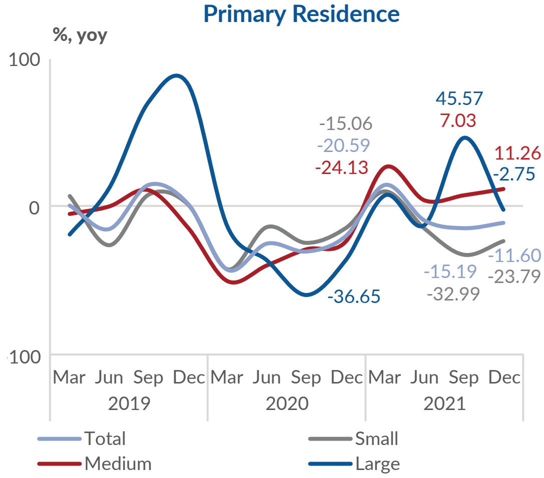
Higher growth of housing loans was consistent with the growing trend of household investment assets. Property sales experienced a shallower 11.60% (yoy) contraction in the second semester of 2021 after declining 20.59% (yoy) in the second semester of 2021 (Graph 2.1.30). The main driver of residential property sales was medium houses, growing 11.26% (yoy) in the fourth quarter of 2021. Meanwhile,

Graph 2.1.28. Household Loan Growth by Residence Type



Source : Bank Indonesia

Graph 2.1.29. Sales of Residential Property as a Primary Residence

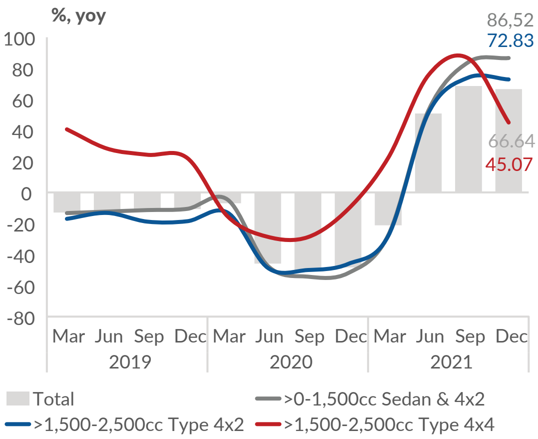


Source : Bank Indonesia
Notes: small (< $36m^2$), medium ($36\text{-}70m^2$), large (> $70m^2$)

large residences recorded a significant uptick in the third quarter of 2021, reaching 45.57% (yoy), before slumping into a 2.75% (yoy) contraction in the fourth quarter of 2021. Finally, housing loans on small houses experienced a contraction throughout the second half of 2021.

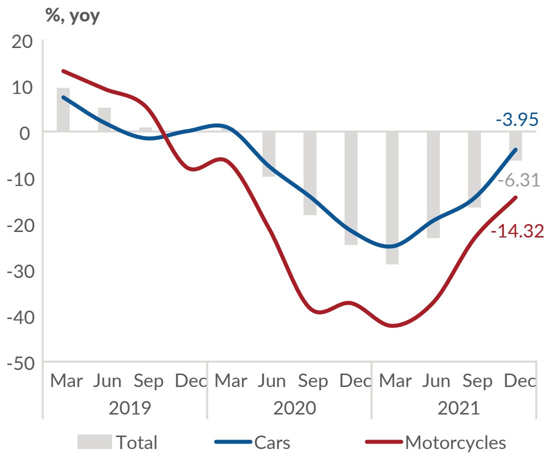
The sales tax exemption on luxury goods (PPnBM), coupled with looser downpayment requirements on automotive loans/financing stoked demand. After the introduction of the sales tax exemption on luxury goods and 0% downpayment requirements in March 2021, automotive sales charged into positive territory in the first quarter of 2021 and continued to improve through to the fourth quarter of 2021, when 66.64% (yoy) growth was recorded. Furthermore, all vehicle types posted stronger sales performance in 2021. After declining significantly by 21.62% (yoy) and 37.31% (yoy) in the fourth quarter of 2020, automotive loans to purchase cars and motorcycles experienced shallower 3.95% (yoy) and 14.32% (yoy) contractions in the fourth quarter of 2021 (Graph 2.1.31). Recent improvements in terms of housing and automotive loans are expected to persist in line with ongoing fiscal stimuli and accommodative macroprudential policy in the form of relaxed downpayment requirements through to the end of 2022. The policy measures were taken in accordance with prudential principles to contain credit risk while reviving the property and automotive sectors.

Graph 2.1.30. Automotive Sales Growth



Source : Association of Indonesia Automotive Industries (GAIKINDO)

Graph 2.1.31. Automotive Loan Growth



Source: Bank Indonesia and OJK

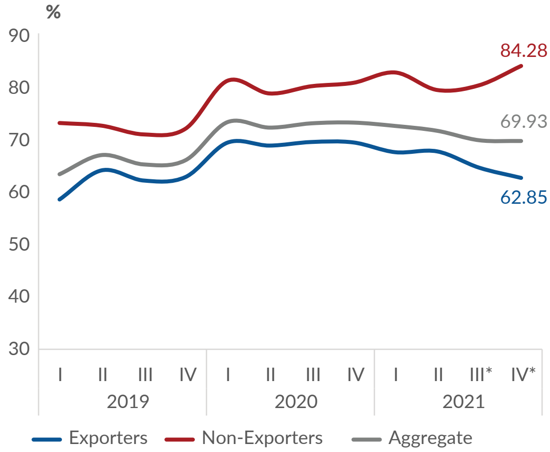
2.2 Financial System Resilience Maintained

2.2.1. Corporate and Household Resilience Maintained

Corporate resilience was relatively well maintained, accompanied by improving repayment capacity in line with stronger operational performance. Corporate repayment capacity has improved, as reflected by an increase in the median interest coverage ratio (ICR) from 1.88 in the second quarter of 2021 to 2.32 in the fourth quarter of 2021 (Table 2.2.1.1). Meanwhile, the debt-to-equity ratio (DER) remained relatively stable in the second semester of 2021 in the 70-71% range (Graph 2.2.1.1), indicating that corporations relied on internal funds to meet their financial obligations.

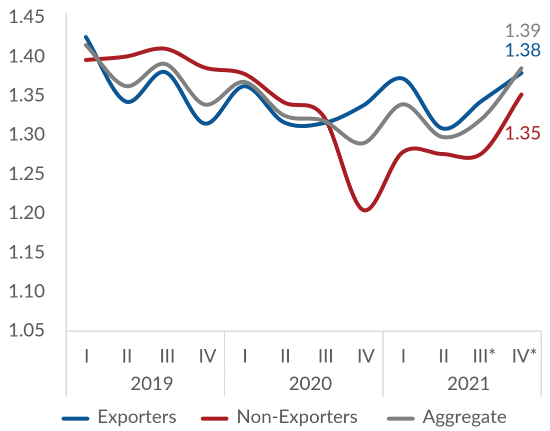
Looser liquidity conditions pointed to improving corporate performance, particularly among exporters. As an aggregate, the current ratio increased from 1.30 in the second quarter of 2021 to 1.39 in the fourth quarter of 2021 (Graph 2.2.1.2). In addition, the cash ratio also improved from 0.39 in the second quarter of 2021 to 0.46 in the fourth quarter of 2021 (Graph 2.2.1.3).

Graph 2.2.1.1. Debt to Equity



Source : Bloomberg, processed; *) Preliminary data

Graph 2.2.1.2. Current Ratio



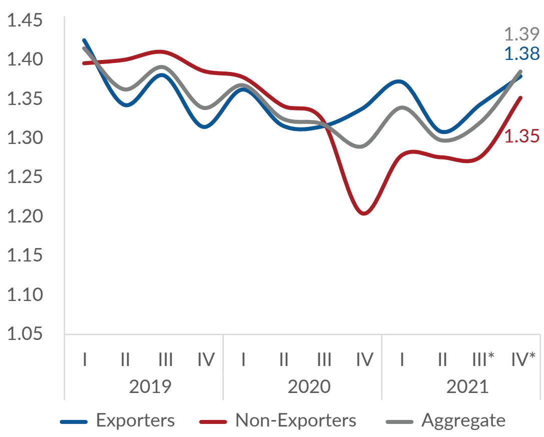
Source : Bloomberg, processed; *) Preliminary data

Table 2.2.1.1. Median Interest Coverage Ratio (ICR) by Sector

Sector	2019				2020				2021			
	I	II	III	IV	I	II	III	IV	I	II	III*	IV*
Agriculture	0.95	-0.65	1.19	1.18	0.95	0.78	1.52	2.59	2.63	2.33	3.62	4.33
Mining	2.24	3.01	3.28	1.83	3.80	1.43	1.44	0.91	2.27	4.13	6.86	7.53
Manufacturing	2.79	1.99	2.63	2.32	2.20	0.69	1.92	2.23	2.77	2.51	2.69	2.88
Electricity, Gas and Water Supply	5.17	5.44	1.28	-0.75	3.12	-1.24	0.98	-1.11	3.94	-0.06	0.39	2.97
Construction	2.16	1.26	1.71	2.85	0.90	-0.05	0.82	0.52	1.02	0.78	1.12	1.88
Trade	1.59	1.63	2.72	2.76	0.85	-0.54	0.00	0.17	0.78	1.47	0.55	0.89
Transportation	1.79	2.18	2.28	1.53	1.32	0.71	0.45	0.31	1.11	1.73	1.38	1.59
Corporate Service	2.41	2.31	1.68	1.34	1.93	-0.09	0.62	0.95	1.28	0.68	0.77	0.95
Social Services	2.40	4.36	6.71	6.07	4.71	0.56	4.07	2.28	3.44	5.31	2.88	1.60
Aggregate	**2.21**	**1.83**	**2.31**	**2.21**	**1.68**	**0.36**	**1.02**	**1.10**	**1.70**	**1.88**	**1.81**	**2.32**

Source: Bloomberg, processed *) Preliminary data

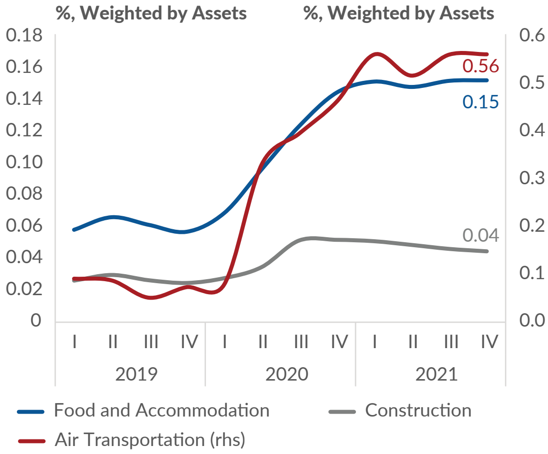
Graph 2.2.1.3. Cash Ratio



Source : Bloomberg, processed; *) Preliminary data

In general, despite improving corporate sector performance, the potential scarring effect of a prolonged pandemic on a number of corporations remains, especially small enterprises and corporations in the construction sector, air transportation as well as accommodation and food service activities, as indicated by a relatively rigid probability of default for those three subsectors at the end of 2021 compared with conditions at the end of 2020 (Graph 2.2.1.4). Notwithstanding, the resilience of most corporations is expected to be maintained and gradually improve in line with operational performance.

Graph 2.2.1.4. Probability of Default in Sectors Impacted by Scarring Effect

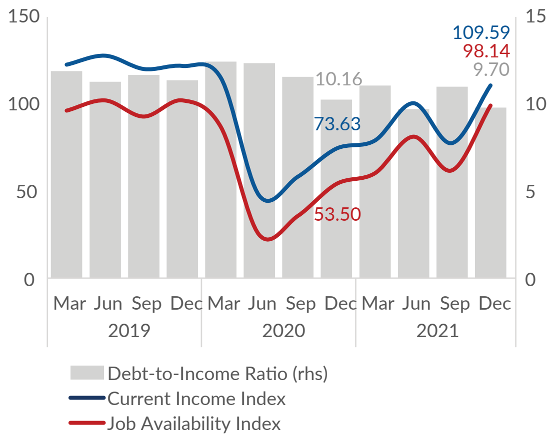


Source: Capital IQ and Bloomberg, processed

Improving conditions in the corporate sector translated into job availability and household income, thereby reinforcing household resilience.

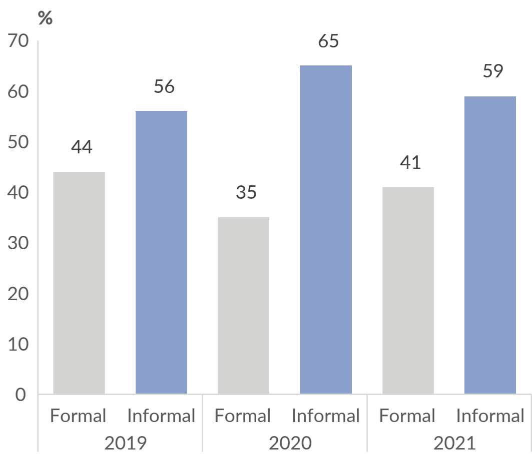
Financial performance in the household sector improved in line with greater job availability, as reflected in the Current Income Index and Job Availability Index, which improved throughout 2021. Household sector resilience was relatively well maintained in 2021, as evidenced by a lower debt-to-income ratio compared with conditions one year earlier, namely from 10.16% at the end of 2020 to 9.7% at the end of 2021 (Graph 2.2.1.5). Improving financial conditions in the household sector were also reflected in the proportion of workers employed in formal sectors, which tend to have higher incomes, from 35% in August 2020 to 41% in August 2021. On the other hand, the share of informal workers, typically low-income workers, shrank from 65% in August 2020 to 59% in August 2021 (Graph 2.2.1.6).

Graph 2.2.1.5. Current Income Index, Job Availability Index and Debt-to-Income Ratio



Source : Bank Indonesia

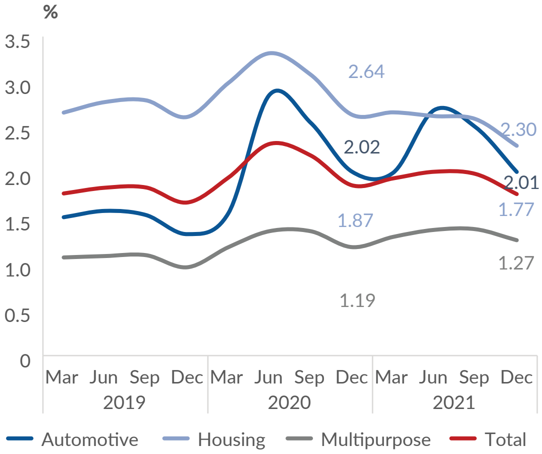
Graph 2.2.1.6. Share of Formal to Informal Workers



Source : Statistics Indonesia, processed

Improving financial conditions contributed to lower credit risk in the household sector. Greater household repayment capacity helped to reduce NPL. The NPL ratio improved from 1.87% in the fourth quarter of 2020 to 1.77% in the fourth quarter of 2021 (Graph 2.2.1.7). The lower NPL ratio primarily stemmed from automotive loans, housing loans and multipurpose loans, improving respectively from 2.69%, 2.63% and 1.38% in the second quarter of 2021 to 2.01%, 2.30% and 1.27% in the fourth quarter of 2021.

Graph 2.2.1.7. NPL Ratio in Household Sector



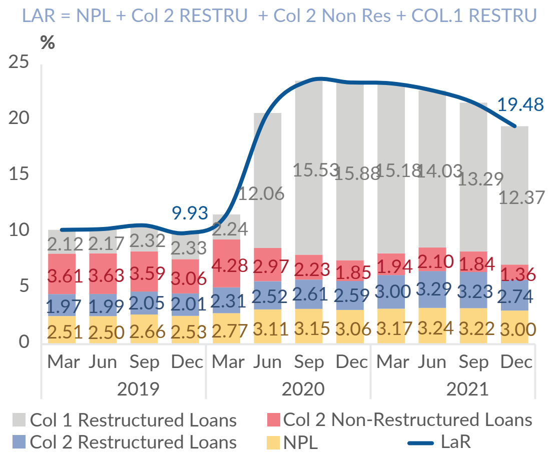
Source : Bank Indonesia

2.2.2. Banking Industry and NBFI Resilience Maintained

Improving real sector conditions lowered credit risk in the banking industry in 2021 compared with 2020, though not yet to the pre-pandemic level recorded in 2019. Recovering macroeconomic conditions and looser loan restructuring policy contributed to lower NPL and LaR ratios in the banking industry in 2021 at 3% and 19.48% respectively. Nevertheless, the NPL and LaR ratios were still higher than in 2019 at 2.53 and 9.93 (Graph 2.2.2.1). The lower NPL ratio stemmed from non-restructured loans, contrasting the higher NPL ratio of restructured loans (Graph 2.2.2.2). Furthermore, the NPL ratio improved across all economic sectors, except manufacturing, construction and corporate services. The NPL ratio in the manufacturing industry exceeded the 5% threshold, thus demanding careful vigilance (Table 2.2.2.1). Restructured loans experienced a higher NPL due to borrowers with non-viable business prospects, thereby failing to meet the requirements to extend restructuring facilities. Though the NPL of restructured loans increased, the value of restructured loans that improved exceeded the value of those that deteriorated, prompting early signs of lower LaR and outstanding restructured loans in 2021 (Graph 2.2.2.3). The declining trend of outstanding restructured loans affected all loan segments and most economic sectors (Table 2.2.2.2). In general, milder credit risk is projected in the banking industry in 2022 compared with 2021 as macroeconomic conditions continue to improve.

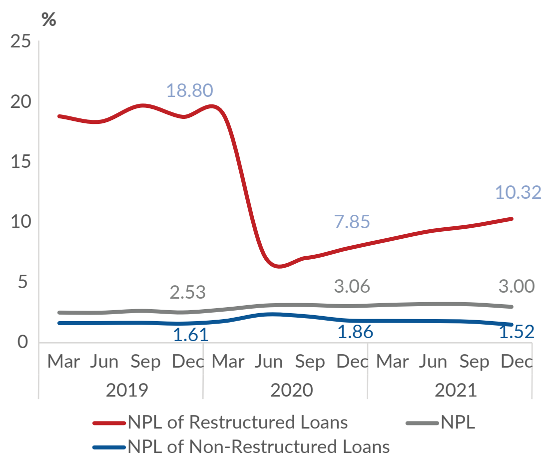
Credit risk continued to exceed pre-pandemic levels, compelling the banking industry to increase provisions for impairment losses in accordance with prudential principles. The banking industry has mitigated potentially higher credit risk by increasing

Graph 2.2.2.1. Credit Risk in Banking Industry



Source : Bank Indonesia

Graph 2.2.2.2. NPL of Restructured Loans and Non-Restructured Loans



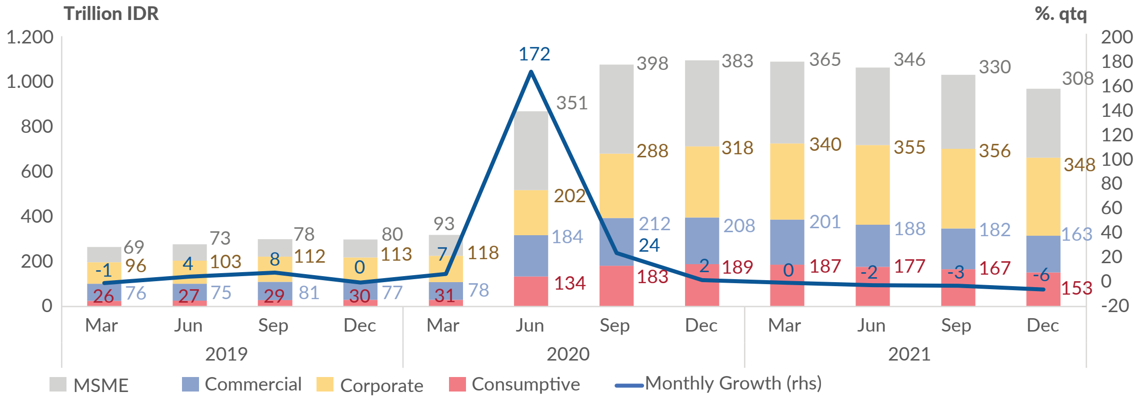
Source : Bank Indonesia

Table 2.2.2.1. Credit Risk by Sector

Sector	Gross NPL (%)			Nominal NPL		
	2019	2020	2021	Δ YOY (Rp T)		Share (%)
				Dec-20	Dec-21	
Agriculture	1.66	2.08	1.74	1.97	-0.80	4.37
Mining	3.58	7.26	4.42	4.24	-2.25	3.92
Manufacturing Industry	3.88	4.58	5.18	4.71	8.35	28.42
Electricity, Gas and Water Supply	0.89	1.24	1.04	0.32	-0.42	0.96
Construction	3.55	3.45	3.62	0.11	0.78	7.94
Trade	3.66	4.54	4.33	7.19	-0.66	27.35
Transportation	1.64	2.16	2.07	1.69	0.61	3.66
Corporate Services	1.43	1.92	2.11	1.70	1.20	5.97
Social Services	1.50	2.17	1.54	1.15	-0.87	1.57
Others	1.60	1.80	1.69	2.79	-0.38	15.84
Total	**2.53**	**3.06**	**3.00**	**25.87**	**5.56**	**100**

Source : Bank Indonesia

Graph 2.2.2.3. Bank Loan Restructuring by Segment*



Source : Bank Indonesia
Notes:
Corporate Loans > Rp100 billion, excluding MSME and consumer loans
Commercial Loans < Rp100 billion, excluding MSME and consumer loans

Table 2.2.2.2. Bank Loan Restructuring by Sector

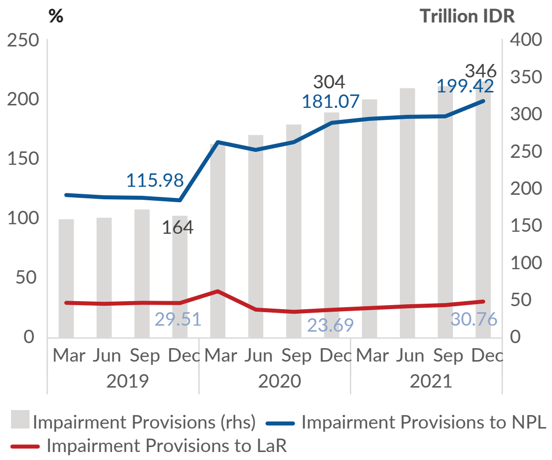
Sector	Restructuring Value (Rp, Trillions)			Δ (Rp T)	Δ (Rp T)
	Dec-19	Dec-20	Dec-21	Dec-20 - Dec-19	Dec-21 - Dec-20
Agriculture	27.38	85.39	68.47	58.00	-16.91
Mining	9.26	19.77	15.13	10.51	-4.64
Manufacturing Industry	79.25	172.99	164.27	93.74	-8.72
Electricity, Gas and Water Supply	4.77	11.29	14.65	6.53	3.36
Construction	22.80	85.48	104.29	62.68	18.81
Trade	76.32	331.67	273.03	255.34	-58.64
Transportation	16.41	57.22	48.68	40.81	-8.54
Corporate Services	27.34	104.85	92.03	77.51	-12.82
Social Services	6.60	40.11	38.30	33.51	-1.81
Others	29.95	189.86	153.31	159.91	-36.55
Total	**300.08**	**1,098.63**	**972.17**	**798.56**	**-126.46**

Source: Bank Indonesia

provisions for impairment losses to extend reserve coverage (Graph 2.2.2.4). The ratios of impairment provisions to NPL and impairment provisions to LaR reached 199.42% and 30.76% respectively December 2021, up from 181.07% and 23.69% in the same period of 2020.

The banking industry maintained profitability amid higher provisions for impairment losses by enhancing operational efficiency. This was reflected by a higher return on assets (ROA) in the second semester of 2021 at 1.84% from 1.59% in the same period one year earlier. In addition, the NIM increased in December 2021 to 4.51% from 4.32% in December 2020. Stronger profitability was inextricably linked to bank efforts to enhance operational efficiency, as confirmed by an improvement in the BOPO efficiency ratio from 86.55% in December 2020 to 83.68% in December 2021 (Graph 2.2.2.5). In turn, higher profitability contributed to more capital in the banking industry.

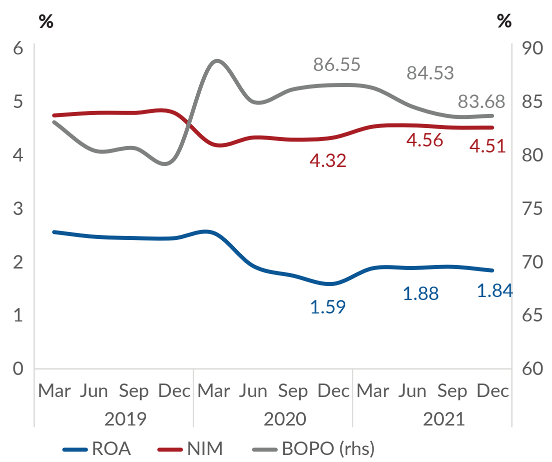
Graph 2.2.2.4. Provisions for Impairment Losses



Source : Bank Indonesia

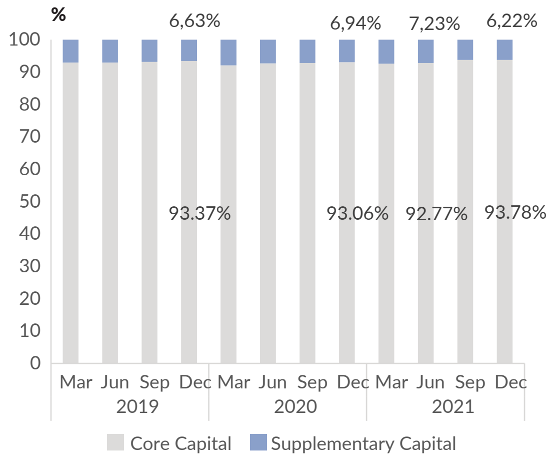
Several banks initiated rights issues to strengthen core capital. In 2021, a total of 20 banks initiated rights issues with a value of Rp147.6 trillion, which increased total capital in the banking industry. The ratio of core capital to total capital reached 93.78% in the second semester of 2021, up from 92.77% in the first semester of 2021 (Graph 2.2.2.6). Increasing core capital edged up the CAR in the banking industry to 25.67% at the end of 2021 from 24.30% in the first semester of 2021 and 23.81% in the second semester of 2020 (Graph 2.2.2.7). The banking industry is expected to continue pursuing a strategy of rights issues in 2022 to meet OJK regulations on core capital, stipulating a minimum core capital of Rp3 trillion by the end of 2022. At the end of January 2022, six banks had already entered the rights issue pipeline for 2022 at the Indonesia Stock Exchange (IDX).

Graph 2.2.2.5. Bank Profitability



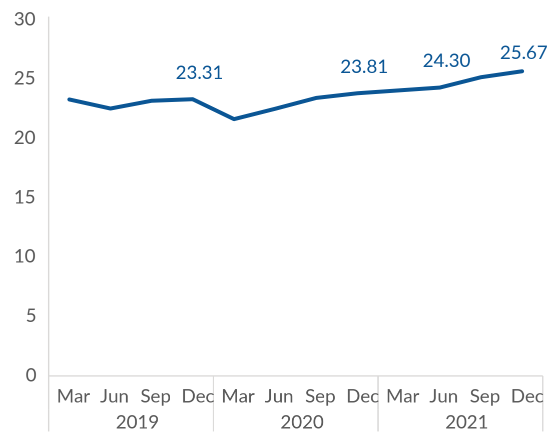
Source : OJK

Graph 2.2.2.6. Composition of Bank Capital



Source: OJK

Graph 2.2.2.7. Capital Adequacy Ratio (CAR)



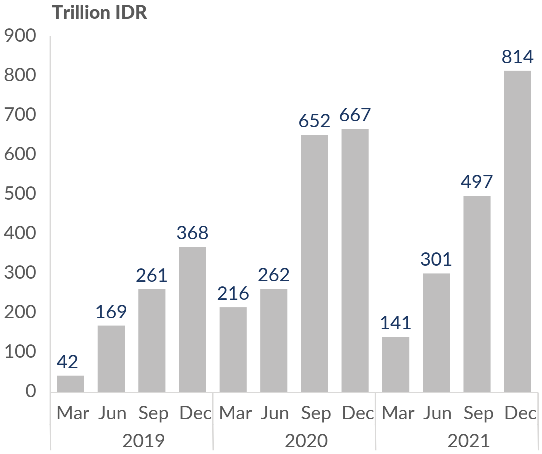
Source: OJK

The banking industry also maintained capital resilience against a potential deterioration of macroeconomic conditions. The results of stress tests showed that the coverage of impairment provisions, coupled with a high capital ratio, would absorb potential losses in the banking industry posed by potential deterioration of macroeconomic conditions caused by pandemic uncertainty, policy normalisation by the Fed and increasing global financial market volatility, with the banking industry expected to maintain CAR above 20%.

Ample liquidity in the banking system was indicative of robust conditions, with the highest net inflow of third-party funds recorded in recent history. The net inflow of third-party funds at the end of 2021 stood at Rp814 trillion, increasing sharply from Rp667 trillion in the same period one year earlier (Graph 2.2.2.8). In addition to a net fiscal expansion in the context of national economic recovery, improving corporate sales, particularly in the commodities sector and manufacturing industry, coupled with the wait-and-see posture of the corporate sector in relation to long-term investment also contributed to the higher net inflow. Such dynamics triggered a significantly larger funding surplus in the banking industry of Rp527 trillion in the second semester of 2021 from Rp201 trillion in the first semester of 2021. As credit growth continued to recover, however, the funding surplus in 2021 was lower than the Rp800 trillion recorded at the end of 2020 (Graph 2.2.2.9).

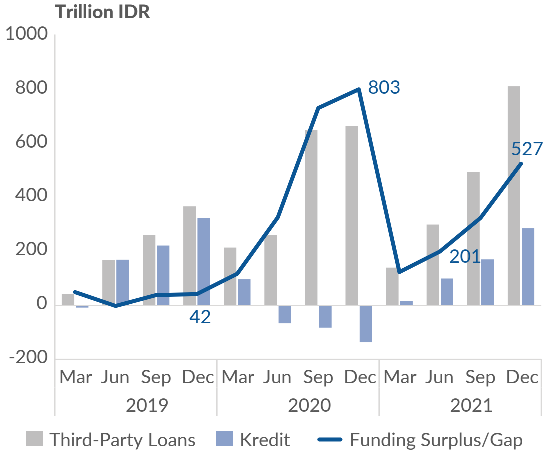
Liquidity resilience in the banking industry increased in line with excess liquidity placements in risk-free assets, such as government securities and placements at Bank Indonesia. Such conditions were reflected in the composition of productive assets,

Graph 2.2.2.8. Net Inflow of Third-Party Funds



Source : Bank Indonesia

Graph 2.2.2.9.Funding Surplus (Gap)



Source : Bank Indonesia

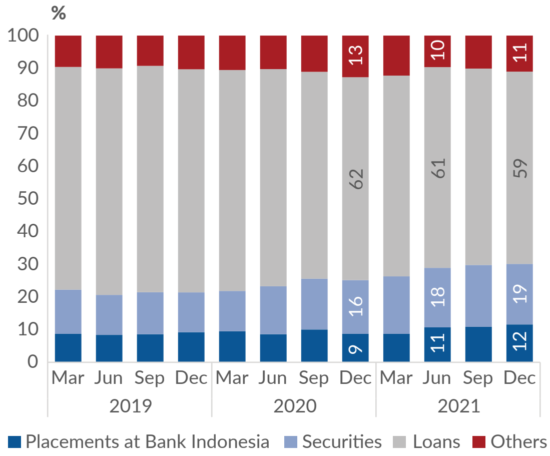
with income from securities accounting for 19% in December 2021, up from 16% one year earlier. The portion of placements at Bank Indonesia also climbed to 12% in December 2021 from 9% in December 2020 (Graph 2.2.2.10). Banks opted to purchase securities in the context of optimising liquid assets based on cash flow needs, risk appetite and liquid instrument limitations in the domestic financial markets. This edged up the ratio of liquid assets[12] to third-party funds at the end of 2021 to 35.12% from 31.67 at the end of the previous year (Graph 2.2.2.11). Higher liquidity ratios were also reflected in the upward Macroprudential Liquidity Buffer (MPLB) trend, rising 26.36% at the end of 2021. Liquidity resilience was maintained in the short and long term, as confirmed by a Liquidity Coverage Ratio (LCR)[13] of 257.8% and a Net Stable Funding Ratio (NSFR)[14] of 142.5% in the second semester of 2021, well above the 100% thresholds (Graph 2.2.2.12). A high liquidity buffer has helped to maintain liquidity resilience in the banking industry amid plans to revive lending and normalise reserve requirements by 300 basis points in 2022.

12 Liquid assets are calculated as follows: (Cash + Placements at BI + Government Securities) – (RR + MPLB + MIR)

13 The Liquidity Coverage Ratio (LCR) refers to POJK No. 42/POJK.03/2015 concerning the Liquidity Coverage Ratio for Commercial Banks.

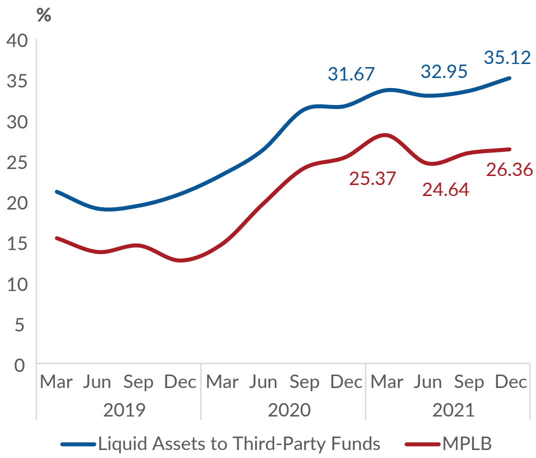
14 The Net Stable Funding Ratio (NSFR) refers to POJK No. 50/POJK.03/2017 concerning the Net Stable Funding Ratio for Commercial Banks.

Graph 2.2.2.10. Composition of Productive Assets



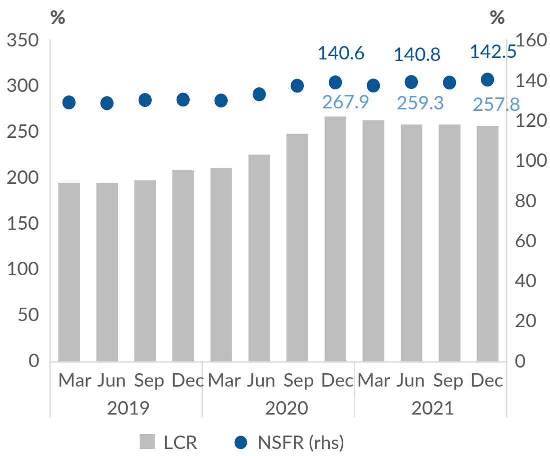
Source : Bank Indonesia

Graph 2.2.2.11. Ratio of Liquid Assets to Third-Party Funds and Macroprudential Liquidity Buffer (MPLB)



Source : Bank Indonesia

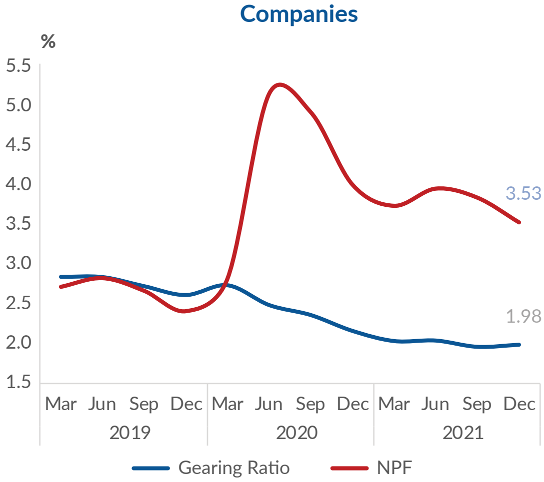
Graph 2.2.2.12. Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR)



Source : OJK

The resilience of finance companies was also maintained, supported by improving financing risk and a solid capital base. Recovering household financial conditions, a successful restructuring program and the option for existing borrowers to extend restructuring have helped finance companies contain the level of non-performing financing (NPF) during the pandemic. NPF in 2021 improved to 3.53% after exceeding the 5% threshold in 2020 (Graph 2.2.2.13). Meanwhile, capital remained solid, as indicated by a gearing ratio below the 10-point threshold at just 1.98 in December 2021. A lower gearing ratio compared with conditions prior to the pandemic reduced the amount of external funding received by finance companies in 2021.

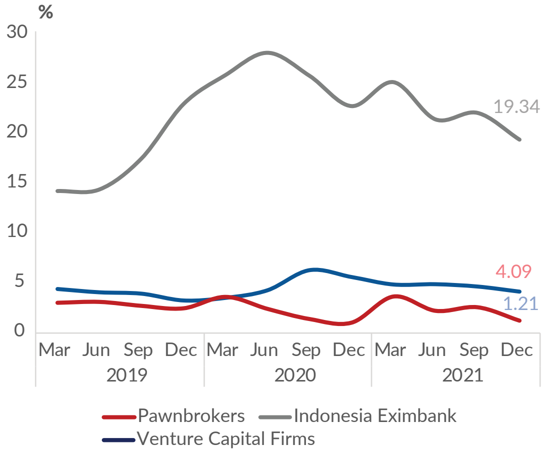
Graph 2.2.2.13. NPF and Gearing Ratio at Finance Companies



Source : OJK

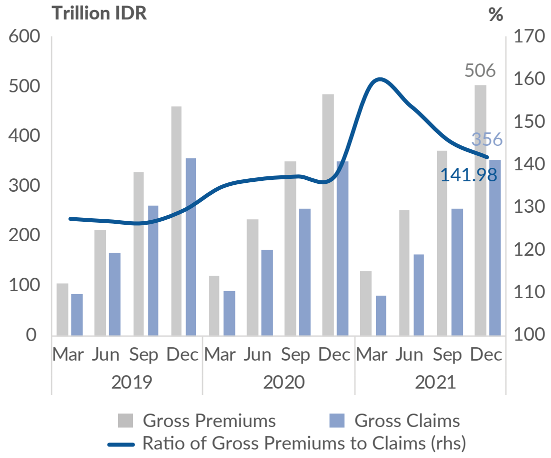
Lower financing risk was also reported in other non-bank financial industries. At the end of 2021, the level of financing risk in the pawnbroker and venture capital industries was below the 5% threshold at 1.21% and 4.09% respectively. NPF, as a proxy of financing risk, improved in the pawnbroker industry due to restructuring, repayments and new disbursed financing from the auction, resale or reclaim of goods previously pledged. On the other hand, financing risk at Indonesia Eximbank remained high yet tracked a lower trend, with NPF decreasing to 19.34% at the end of 2021 (Graph 2.2.2.14). Furthermore, capital was well maintained at pawnbrokers, Indonesia Eximbank and venture capital firms, as indicated by a low debt-to-equity ratio (DER) in the pawnbroker industry of 1.50, accompanied by gearing ratios for Indonesia Eximbank and the venture capital industry below the respective thresholds at 1.92 and 0.71 at the end of 2021.

Graph 2.2.2.14. NPF of Pawnbrokers, Indonesia Eximbank and Venture Capital Firms



Source: OJK, PT Pegadaian

Graph 2.2.2.15. Gross Premiums and Claims of Insurance Industry

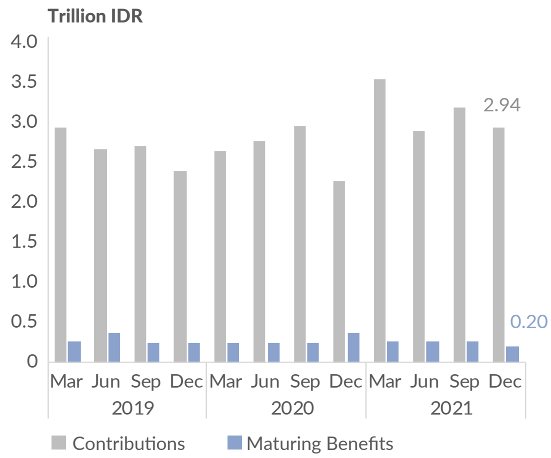


Source : Bank Indonesia

Boosted by the economic recovery in 2021, the insurance and pension fund industries continued to perform better. Compared with conditions one year earlier, insurance industry assets increased 12.38% (yoy) at the end of 2021, while the ratio of gross premiums to gross claims increased from 137.70% in 2020 to 141.98% in 2021 (Graph 2.2.2.15). The increase stemmed from a 4.24% (yoy) bump in premiums accompanied by a 1.10% (yoy) decline in claims. On the other hand, the pension fund industry recorded 4.07% (yoy) growth of assets in 2021, while contributions continued to exceed claims on maturing benefits (Graph 2.2.2.16).

The insurance industry maintained solid capital well above the 120% RBC threshold. At the end of 2021, risk-based capital (RBC) in the general insurance industry stood at 327.3%, down slightly from 343.5% in 2020, contrasting an increase recorded in the life insurance industry to 539.8% in 2021 from 528.6% in 2020.

Graph 2.2.2.16. Pension Fund Contributions and Benefits



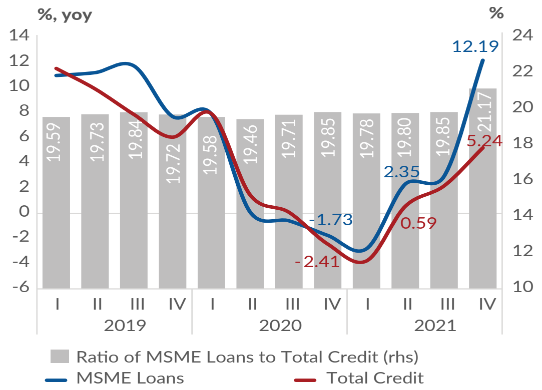
Source : Bank Indonesia

2.3 Fostering Economic and Financial Inclusion

Strong MSME loan growth was achieved and credit risk contained at the end of 2021. MSME loans accelerated to 12.19% (yoy) in the second semester of 2021 from 2.35% (yoy) in the first semester of the year, after contracting 1.73% (yoy) in 2020. High growth pushed up the ratio of MSME loans to total bank credit to 21.17% in the fourth quarter of 2021 (Graph 2.3.1). MSME loan growth was supported by government and regulator efforts to optimise KUR lending, coupled with rapid growth of digital loans, which improved the inclusiveness of bank lending at a micro level. This was also evidenced by 17.5 million additional MSME borrower accounts, bringing the total to 33.5 million accounts in 2021 with a smaller average loan size, particularly among micro enterprises. MSME loan growth was primarily driven by trade, agriculture, manufacturing and social services in line with well-mitigated credit risk (Table 2.3.1).

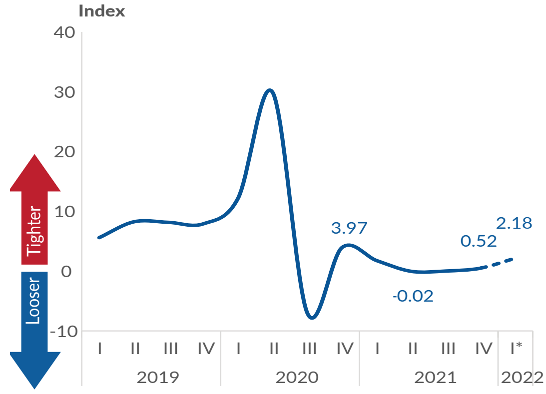
On the supply side, credit growth improved in line with a lower risk perception in the banking industry along with contained credit risk, as reflected by a looser Lending Standards Index for MSME loans than in 2020 (Graph 2.3.2), together with improving NPL and LaR indicators in 2021.

Graph 2.3.1. MSME Loan Performance



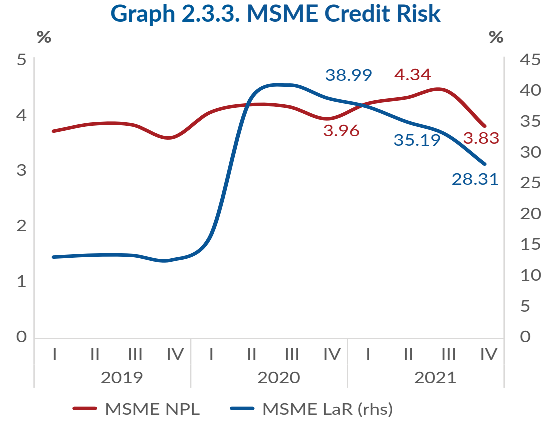
Source : Bank Indonesia

Graph 2.3.2. MSME Lending Standards Index



Source : Bank Indonesia

Graph 2.3.3. MSME Credit Risk



Source : Bank Indonesia

Table 2.3.1. MSME Loan Performance by Sector

Sector	Credit Growth (%,yoy)			NPL (%)			Share (%)
	2019	2020	2021	2019	2020	2021	
Agriculture	16.81	18.92	24.59	2.33	2.11	1.86	14.43
Mining	22.27	-5.92	11.57	4.32	15.42	4.42	0.73
Manufacturing Industry	8.52	1.08	13.80	4.15	4.38	4.23	10.49
Electricity, Gas and Water Supply	41.13	-39.43	-5.73	1.56	3.67	3.50	0.31
Construction	0.10	-17.87	-2.67	8.77	11.36	12.75	4.72
Trade	6.38	-2.05	13.54	3.43	3.48	3.52	54.05
Transportation	11.85	-4.59	-1.95	2.84	3.35	4.50	3.43
Corporate Services	6.08	-16.91	-6.95	2.85	5.06	5.41	4.79
Social Services	7.21	-0.35	13.51	2.63	2.90	2.18	6.97
Others	42.19	44.00	-32.03	14.73	7.69	3.74	0.07
Total UMKM	7.72	-1.73	12.19	3.62	3.96	3.83	100

Source : Bank Indonesia

Boks 2.1

Impact of Bank Consolidation on Banking Industry Resilience in Indonesia

OJK strengthened regulations concerning Commercial Bank Consolidation (POJK No. 12/POJK.03/2020) to bolster the structure, resilience and competitiveness of the banking industry and support financial system stability and national growth. Through the new regulation, OJK regulated consolidation and raised the minimum core capital for commercial banks to Rp3 trillion from 31st December 2022[15]. The implementation of this regulation could potentially alter the characteristics of the banking industry in Indonesia in terms of capabilities, competitiveness, efficiency, financial system resilience and the bank restructuring strategy. Therefore, Bank Indonesia, OJK and LPS conducted joint research to analyse the impact of the new regulation on banking industry characteristics, including credit, competitiveness, interconnectedness, resilience, contribution to systemic risk across various scenarios as well as potential change in the composition of funds before and after consolidation.

Simulations showed that bank consolidation will increase market power, capital resilience and interconnectedness, while changing the composition of deposits given an increase in the composition of low-cost funds. Stronger market power is expected to boost efficiency by increasing competition between banks. Bank resilience will improve, therefore, as reflected by a lower vulnerability index in line with a higher CAR. On one hand, greater interconnectedness could possibly reduce money market segmentation, thus leading to a more equitable distribution of liquidity. On the other hand, however, systemic risk could potentially increase. Meanwhile, a change in the composition of deposits given greater availability of low-cost funds is expected to increase bank efficiency and competitiveness.

Policy coordination and synergy between Bank Indonesia, OJK and LPS are required to mitigate the potential risks posed by bank consolidation. As the macroprudential authority, Bank Indonesia must strengthen forward-looking assessments to identify potential systemic risk earlier and prepare the necessary preventative measures. As the microprudential authority, OJK must undertake preventative measures by ensuring the mergers and/or acquisitions create healthy banks. As the bank resolution authority, LPS must prepare and increase its capabilities to implement effective bank resolution measures considering the larger scale and increasing complexity of post-consolidation banking activities.

15 POJK No. 12/POJK.03/2020, dated 16th March 2020, concerning Commercial Bank Consolidation.

Boks 2.2

Credit Demand and Supply Imbalances during COVID-19 Pandemic[16]

After the COVID-19 outbreak at the beginning of 2020, credit growth in Indonesia declined through to the first quarter of 2021. On one hand, the decline stemmed from a supply contraction as the banking industry became risk averse amid elevated economic uncertainty. On the other hand, however, demand also retreated in response to restrained real sector activity. This research seeks to investigate the contributing factors to credit moderation using the maximum likelihood estimation (MLE) method with a sample period from January 2010 to June 2021.

The research concluded that declining credit growth from the beginning of 2020 to the first quarter of 2021 was the result of a combination of supply and demand side contractions. During the COVID-19 pandemic in 2020, credit supply and demand contractions were observed. Despite excess credit demand at the beginning of 2021, the banking industry remained reluctant to increase credit supply in response to higher credit risk. Such conditions confirmed that decreasing credit supply was influenced more by the banking industry itself.

The research also acknowledged the need for further research using a proxy of fiscal policy considering the existing synergy between fiscal and monetary policies. In addition to fiscal policy, other variables to capture the global economy must be considered given Indonesia's position as a small open economy.

The research also emphasised the importance of building positive public expectations for policy effectiveness. The research showed that expectations of economic conditions moving forward play an important role in determining demand for loans, as confirmed by the significance of the Consumer Confidence Index (CCI) variable in the credit demand function. The formation of expectations should not only explain the policies that will be taken to achieve the predetermined targets, but also the policies that will be taken for each scenario.

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16 This article is adapted from the research winner of the 2021 Bank Indonesia Financial System Stability Call for Papers. The full version, authored by Mohammad Indra Maulana, is available via the Press Release menu on the official Bank Indonesia website or through the following link: https:// bit.ly/PemenangLKISSK2021


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Chapter 03

POLICY RESPONSE TO REVIVE INTERMEDIATION AND MAINTAIN FINANCIAL SYSTEM RESILIENCE

The Government, Bank Indonesia and other relevant authorities constantly strengthened policy synergy in the context of the national policy mix to maintain financial system stability and accelerate the national economic recovery. The expansionary policy of providing stimuli through the national economic recovery program was maintained in line with monetary and fiscal policy to sustain economic resilience and public confidence in the financial system.

Policy synergy between financial sector authorities was strengthened under the auspices of the KSSK in line with economic and financial market dynamics impacted by the COVID-19 pandemic. Coordination between institutional members of the KSSK was realised through promulgation of an across-the-board and sector-specific Integrated Policy Package to revive intermediation and maintain financial system resilience.

As part of the national policy mix, the Bank Indonesia policy mix helped drive the national economic recovery, while maintaining financial stability. The policy mix was implemented through innovative monetary, macroprudential and payment system policies, financial market deepening as well as a green and inclusive economy and finance.

Seeking to maintain monetary stability, Bank Indonesia held a historically low policy rate, maintained rupiah exchange rate stabilisation policy in line with economic fundamentals and market mechanisms through triple intervention as well as injected liquidity through quantitative easing to the money market and banking industry. Closer fiscal and monetary policy coordination intended to support economic stability and recovery, including BI commitment to purchase tradeable government securities (SBN) to fund the State Revenue and Expenditure Budget (APBN) in 2021.

Accommodative macroprudential policy was strengthened and oriented towards accelerating the bank intermediation function revival on the supply and demand sides, while maintaining financial system resilience. Several policies were instituted, including looser Loan/Financing-to-Value (LTV/FTV) ratios and downpayment requirements, the Macroprudential Inclusive Financing Ratio (RPIM) as well as looser rupiah average reserve requirements. In addition, Bank Indonesia implemented accommodative macroprudential policy to stimulate economic growth by maintaining prime lending rate (PLR) transparency and applying the Countercyclical Capital Buffer (CCyB), Macroprudential Intermediation Ratio (MIR) and Macroprudential Liquidity Buffer (MPLB).

Bank Indonesia also continued various payment system digitalisation initiatives to help accelerate economic growth. Based on the Indonesia Payment System Blueprint (BSPI) 2025, payment system digitalisation in 2021 prioritised regulatory reform to create a healthy, competitive and innovative payment system industry. In addition, BI-FAST was also developed as retail payment system infrastructure to create a fast, convenient, affordable, secure and reliable payment system. Meanwhile, Bank Indonesia also expanded the Quick Response Code Indonesia Standard (QRIS) and issued the National Open API Payment Standard (SNAP).

Bank Indonesia continued to accelerate money market deepening in the context of strengthening monetary policy effectiveness and supporting the economic recovery. Implementation of the Money Market Development Blueprint (BPPU) 2025 continued to advance digitalisation and strengthen financial market infrastructure, bolster monetary policy transmission effectiveness through money market product development as well as develop sources of economic financing and risk management. In synergy with the Ministry of Finance, Financial Services Authority (OJK) and Indonesia Deposit Insurance Corporation (LPS), under the Coordination Forum for Development Financing through Financial Markets (FKPPPK), Bank Indonesia also developed financial market instruments and infrastructures to expand sources of economic financing.

Bank Indonesia afforded special attention to development of the green economy and finance to support economic sustainability. This is in line with growing international calls and global focus concerning the impact of climate change on economic and financial stability. In addition to policies, Bank Indonesia also performed internal strengthening as an exemplar for financial institutions making a green transition, including adoption of the Sustainable and Responsible Investment Framework and gradually increasing holdings of sustainable bonds.

3.1 Inter-authority Policy Synergy to Accelerate National Economic Recovery

The Government, Bank Indonesia and other relevant authorities continued to strengthen policy synergy in the context of a national policy mix. National policy synergy was strengthened in 2021 to maintain stability and drive the domestic economic recovery. Solid national economic policy synergy between the Government, KSSK and Bank Indonesia contributed to domestic economic improvements, while maintaining macroeconomic and financial system stability. Towards that end, expansive policies provided stimuli through the national economic recovery program, which was maintained in line with strong fiscal and monetary policy coordination. Bank Indonesia also oriented the full panoply of monetary, macroprudential and payment system policy mix instruments in close coordination and synergy with the Government and KSSK.

The Government maintained fiscal stimuli to contain the deleterious impact of the COVID-19 pandemic on the health of the people and the economy in general. Fiscal stimuli to mitigate the COVID-19 pandemic included state expenditures, credit guarantee programs, tax incentives and interest subsidies, subsidised electricity as well as the development of industrial estates and zones. By the end of 2021, the Government recorded expansionary state expenditures totalling Rp2,786.76 trillion (101.34% of the APBN in 2021), while realisation of the national economic recovery program to deal with the COVID-19 pandemic totalled Rp658.6 trillion. In addition to fiscal stimuli in the form of state expenditures, the Government has also maintained a credit guarantee program since 2020, which was recalibrated in 2021, particularly in terms of corporate loan guarantees. The Government also sought to revive the intermediation function by depositing funds in the banking system, which had a multiplier effect on outstanding loans disbursed by the banking industry, totalling Rp458.22 trillion extended to 5.49 million borrowers in December 2021. Fiscal stimuli were also provided in the form of tax incentives, bonded zone facilities, import tax waivers on materials for export-oriented goods and the development of special economic zones.

Fiscal and monetary policy coordination was strengthened to support economic stability and recovery. Bank Indonesia maintained its commitment to purchase SBN to fund the APBN in 2021 in accordance with the Joint Decree issued by the Minister of Finance and Governor of Bank Indonesia[17]. In 2021, Bank Indonesia purchased SBN to fund the APBN totalling Rp358.32 trillion, including Rp143.32 trillion through primary auction and Rp215 trillion through private placement, which extended the Rp473.42 trillion of SBN purchased in 2020, consisting of Rp75.86 trillion through primary auction and Rp397.56 trillion through private placement as a form of burden sharing for the State Budget.

The formulation and implementation of macroprudential policy by Bank Indonesia were conducted in synergy with other relevant authorities. Coordination with the Government, OJK and LPS was achieved through implementation of the KSSK Integrated Policy Package, containing across-the-board and sector-specific policies. Such policy synergy has maintained economic recovery momentum, with national economic growth in 2021 charging back into positive territory at 3.69% (yoy) after contracting 2.07% (yoy) in 2020. Supporting the national economic recovery, particularly in the real sector, Bank Indonesia through KSSK has designated 38 priority sectors, grouped into three

17 Joint Decree of the Minister of Finance and Governor of Bank Indonesia, issued on 16th April 2020 (KB I), Joint Decree of the Minister of Finance and Governor of Bank Indonesia, issued on 7th July 2020 (KB II) and Joint Decree of the Minister of Finance and Governor of Bank Indonesia, issued on 23rd August 2021 (KB III).

clusters, namely resilient sectors, growth drivers and slow starters. Based on the capacity of priority sectors to stimulate exports and gross domestic product (GDP), eight of the priority sectors were categorised in more granular terms, namely Food and Beverages, Chemicals, Automotive, Rubber, Paper, Basic Metals, Textiles and Footwear. KSSK held Focus Group Discussions (FGD) with industry associations, industry players, MSMEs and financial institutions to map and identify the structural constraints faced. Considering that debottlenecking efforts require coordination across sectoral boundaries, KSSK synergy was expanded to include the involvement of relevant government ministries/agencies.

OJK maintained microprudential policy by providing stimuli to the financial services sector to maintain faster national economic recovery momentum. OJK extended loan/financing restructuring policy until 2023 to strengthen financial services industry resilience. Seeking to revive financing to priority sectors, OJK loosened RWA for loans/financing in the Property, Automotive and Health sector. OJK also continued to raise financial literacy in line with the development of financial products to increase consumer protection.

LPS also strengthened the intermediation function by lowering the deposit insurance rate. LPS lowered the deposit insurance rate to 3.5% for rupiah deposits, 0.25% for foreign currency deposits and 6% for rural banks, effective from 29th January 2022 to 27th May 2022. The measure intends to lower the cost of funds in the banking industry and reduce lending rates. The policy is continuously evaluated and calibrated to drive the economic recovery optimally. In addition, LPS extended relief to the banking industry in the form of adjusting fines for late payment of guarantee premiums, while also relaxing the reporting schedule.

Broad policy synergy between Bank Indonesia and OJK was also strengthened under the auspices of the Macroprudential-Macroprudential Coordination Forum (MMCF). Policy coordination between Bank Indonesia and OJK was primarily oriented towards fostering national economic recovery, maintaining financial system stability, financial market deepening and payment system digitalisation. Coordination between the two authorities aimed to eliminate crosscutting issues. In terms of formulating accommodative macroprudential policy, Bank Indonesia maintained intensive coordination with OJK as the microprudential authority. The Macroprudential Inclusive Financing Ratio (RPIM) was coordinated intensively with OJK to support government efforts to increase access to finance and development for MSME as well as low-income individuals. Through such policy synergy, OJK is expected to increase the banking industry's contribution to RPIM implementation. MMCF also coordinated prime lending rate transparency policy, reviewed the methodology and updated the list of systemic banks, reviewed the Financial Stability Reform agenda of Indonesia's G20 Presidency in 2022, standardised repo transactions, strengthened participation in rupiah monetary operations and continued financial market development, targeting the foreign exchange market. Furthermore, Bank Indonesia and OJK also signed a cooperation agreement concerning the disbursement of (sharia) short-term liquidity assistance on 27th August 2021, which serves as implementation regulations for the joint decree signed between Bank Indonesia and OJK in October 2020. The joint decree and cooperation agreement intend to facilitate an orderly and seamless coordination mechanism between both authorities in terms of disbursing (sharia) short-term liquidity assistance to illiquid but solvent banks. Regulatory reform of the payment system by Bank Indonesia was implemented in synergy with microprudential policy for the banking industry, including regulations concerning non-bank payment service providers, payment system infrastructure operators and the National Open API Payment Standard (SNAP). The harmonisation of payment system policies involves reconciling the business processes and licensing requirements in accordance with the supervisory goals of each respective authority to safeguard risk management, information system capabilities and consumer protection. Other coordination topics between Bank Indonesia and OJK discussed at the MMCF include the role of the joint coordinator of Financial Soundness Indicator (FSI) data and the eradication of illegal online loans through the signing of a joint statement and cooperation agreement between OJK, the Indonesian National

Police, Ministry of Communication and Information as well as the Ministry of cooperatives and SMEs. Meanwhile, data and/or information was exchanged intensively between Bank Indonesia and OJK to strengthen policy analysis at both institutions, including the continuous improvement of data and/or information quality.

Coordination between Bank Indonesia and OJK to formulate microprudential policy was also improved to support banking sector development. In the second semester of 2021, OJK and Bank Indonesia coordinated to harmonise OJK regulations with other relevant regulations under the jurisdiction of Bank Indonesia. Microprudential regulations related to sharia banks, commercial bank products, (sharia) rural bank products and Bank Accounting Standards for Conventional Commercial Banks. In addition, synergy between both organisations produced the Digital Banking Transformation Blueprint as part of the Indonesia Banking Development Roadmap 2020-2025, specifically the pillar on accelerating digital transformation in harmony with Bank Indonesia's digital economy and finance policies.

Synergy and coordination between Bank Indonesia and LPS were implemented continuously to maintain financial system stability. The coordination spanned various areas, including simulations of repo transactions with Bank Indonesia for SBN held by LPS. Both authorities improved their respective internal procedures based on the findings of the simulations, thus refining and fully preparing repo transactions with Bank Indonesia using SBN held by LPS. Coordination also targeted Bank Indonesia's active participation in working groups in synergy with other institutional members of KSSK as a form of support for LPS in relation to the Bank Restructuring Program, benchmarking internal regulations at Bank Indonesia, including governance, joint socialisation activities to build academic awareness of the tasks and responsibilities of Bank Indonesia and LPS in terms of maintaining financial system stability and national economic recovery momentum, as well as coordination to increase the competencies and capabilities of LPS employees with respect to macroprudential and monetary policy in the form of internships at work units relating to Bank Indonesia.

Multilateral coordination and cooperation between Bank Indonesia, OJK and LPS was further optimised in relation to integrated reporting and joint research. Inter-authority collaboration to create more efficient bank reporting to the authorities was strengthened by the full implementation of Integrated Commercial Bank Reports (LBUT) in January 2022. The data sourced from such reports is subsequently used as the basis for assessments and/or policymaking by each respective authority. Moving forward, coordination will be maintained, including synergising the LPS reporting system with LBUT. Tripartite coordination will also involve joint research to analyse the impact of bank consolidation on banking industry resilience in Indonesia. The findings will be used as a reference by the three authorities to perform further assessments and formulate an optimal policy response. Joint research will also focus on topics selected in accordance with the needs of the three authorities and based on the prevailing financial services sector landscape, particularly the banking industry.

3.2 Bank Indonesia Policy Mix Driving National Economic Recovery, Maintaining Monetary and Financial System Stability

Bank Indonesia continued to orient the full panoply of policy mix instruments throughout 2021 at supporting the national economic recovery. The policy mix comprises five policy instruments, namely monetary policy, macroprudential policy, payment system digitalisation, money market deepening as well as a green and inclusive economy and finance. Monetary policy through low interest rates was maintained. Rupiah exchange rate stabilisation policy, in line with economic fundamentals and market mechanisms, was pursued through triple intervention. Quantitative easing to the money market and banking industry were continued throughout 2021. From a macroprudential perspective, Bank Indonesia held an accommodative macroprudential policy stance using various policy instruments in response to the supply and demand-side challenges. In the payment system, Bank Indonesia continued to accelerate digitalisation and nurture economic recovery, particularly in terms of household consumption, while accelerating an inclusive and efficient economy and finance. Financial market deepening was also accelerated to strengthen monetary policy effectiveness and support the national economic recovery. In addition, the transition towards a green and inclusive economy and finance was progressed through the development of green and inclusive financial instruments.

3.2.1. Banking and Non-Bank Financial Industry Resilience Maintained

Bank Indonesia has held a historically low policy rate and maintained liquidity injections to stimulate the economic recovery process. After reducing the BI-7 Day Reverse Repo Rate (BI7DRR) five times in 2020, Bank Indonesia in February 2021 lowered the BI7DRR to the historically low level of 3.50%, which was held until the end of 2021 in line with the need to maintain exchange rates and financial system stability amid low predicted inflation and efforts to revive economic growth. Bank Indonesia also continued to inject liquidity to the banking industry to strengthen lending to the corporate sector. In 2021, Bank Indonesia increased liquidity in the banking system by Rp147.83 trillion through quantitative easing. Since 2020, therefore, quantitative easing policy has injected liquidity totalling Rp874.4 trillion, equivalent to approximately 5.3% of GDP.

Stabilisation policy was also strengthened to maintain rupiah exchange rate stability in line with economic fundamentals and market mechanisms. This was implemented through a triple intervention strategy, targeting the spot and domestic non-deliverable forwards (DNDF) markets as well as purchasing SBN in the secondary market. Currency stabilisation policy was also supported by adequate reserve assets as a first line of defence. In addition, Bank Indonesia continued to strengthen international bilateral and multilateral cooperation as a second line of defence. Cooperation with other central banks in the region was also strengthened and expanded to promote Local Currency Settlement (LCS) in terms of trade and investment to reduce dependence on the US dollar. Furthermore, Bank Indonesia also optimised monetary operations to safeguard market mechanisms and the availability of liquidity in the markets, thus supporting exchange rate policy effectiveness.

3.2.2. Strengthening Accommodative Macroprudential Policy

Bank Indonesia maintained an accommodative macroprudential policy stance to revive a balanced and quality intermediation function. On the demand side, Bank Indonesia continued to relax the loan-to-value (LTV) ratio on property loans, the financing-to-value (FTV) ratio on property financing and downpayment requirements on automotive loans/financing to accelerate the intermediation recovery, specifically targeting the Property and Automotive sectors. On the supply side, supporting joint efforts with the Government to empower MSME as the backbone of the Indonesian economy and increase access to finance for low-income individuals, Bank

Indonesia issued the RPIM, which is calculated based on the expertise and business models of banks in terms of disbursing inclusive financing. In addition, Bank Indonesia stimulated lending to the corporate sector through incentives in the form of lower rupiah average reserve requirements for banks extending loans/financing to priority sectors and/or meeting the RPIM target. Bank Indonesia also maintained prime lending rate (PLR) transparency policy as a means to encourage the banking industry to reduce lending rates. Moreover, Bank Indonesia held the countercyclical capital buffer (CCyB) at 0% and MIR in the 84-94% range with the gradual reactivation of lower disincentive parameters. Furthermore, the Macroprudential Liquidity Buffer (MPLB) was set at 6% with repo flexibility at 6%, accompanied by a Sharia Macroprudential Liquidity Buffer of 4.5% and repo flexibility of 4.5%.

Bank Indonesia strengthened the (Sharia) Macroprudential Intermediation Ratio to boost bank lending to the corporate sector, targeting general and export activity. (Sharia) MIR[18] policy was strengthened by the inclusion of letters of credit (L/C) as a component in the calculation of MIR. In addition, Bank Indonesia reactivated the lower disincentive parameter gradually from 0.10-0.15 from 1st May 2021, specifically for banks with NPL/NPF below the 5% threshold, Minimum Capital Adequacy Requirements exceeding 14% and explicit (sharia) MIR targets. Based on ample liquidity in the banking industry, the lower disincentive parameter was reactivated for all banks with a (sharia) MIR below 84% and NPL below 5% form 1st January 2022. The gradual reactivation of the lower disincentive parameter is illustrated in Figure 3.2.2.1 below.

In the second semester of 2021, Bank Indonesia expanded the scope of components available to meet the MIR / (Sharia) MIR[19] in line with national retail payment system infrastructure development, namely the Bank Indonesia-fast payment (BI-FAST) system. With bank funds in the BI-FAST system for settlement purposes, the MIR / (sharia) MIR can be met based on the bank's rupiah account balance in the Bank Indonesia – Real Time Gross Settlement (BI-RTGS) system as well as the funds in the BI-FAST system. This regulation is effective from 3rd January 2022.

The MPLB / (Sharia) MPLB was held to maintain adequate liquidity and repo flexibility in the banking industry in the face of several domestic and international challenges. MPLB / (Sharia) MPLB

Figure 3.2.2.1. Gradual Reactivation of Lower Disincentive Parameter

2021 1 May - 31 August

a. RIM/RIM Sharia **< 75%**

NPL/ NPF	Minimum Capital Adequacy Requirement	Lower Disincentive Parameter
<5%	KPMM ≤ 14%	0.00
	14% < KPMM≤ 19%	0.10
	KPMM > 19%	0.15
≥ 5%	-	0.00

b. RIM/RIM Sharia **75% to < 84%**

Lower Disincentive Parameter	0.00

2021 1 Sept - 31 Dec

a. RIM/RIM Sharia **< 80%**

NPL/ NPF	Minimum Capital Adequacy Requirement	Lower Disincentive Parameter
<5%	KPMM ≤ 14%	0.00
	14% < KPMM≤ 19%	0.10
	KPMM > 19%	0.15
≥ 5%	-	0.00

b. RIM/RIM Sharia **80% to < 84%**

Lower Disincentive Parameter	0.00

2022 Since 1 Jan

RIM/RIM Sharia **< 80%**

NPL/ NPF	Minimum Capital Adequacy Requirement	Lower Disincentive Parameter
<5%	KPMM ≤ 14%	0.00
	14% < KPMM≤ 19%	0.10
	KPMM > 19%	0.15
≥ 5%	-	0.00

Source : Bank Indonesia

18 Board of Governors Regulation (PADG) No. 23/7/PADG/2021, dated 26th April 2021, as the third amendment to PADG No. 21/22/PADG/2019 concerning the Macroprudential Intermediation Ratio and Macroprudential Liquidity Buffer for Conventional Commercial Banks, Sharia Banks and Sharia Business Units.

19 PBI No. 23/17/PBI/2021, as the third amendment to PBI No. 20/4/PBI/2018 concerning the Macroprudential Intermediation Ratio and Macroprudential Liquidity Buffer for Conventional Commercial Banks, Sharia Banks and Sharia Business Units as well as PADG No. 23/31/PADG/2021, as the fourth amendment to PADG No. 21/22/PADG/2019 concerning the Macroprudential Intermediation Ratio and Macroprudential Liquidity Buffer for Conventional Commercial Banks, Sharia Banks and Sharia Business Units.

stipulates the minimum liquidity reserve in rupiah that must be maintained by conventional and sharia commercial banks in the form of securities. For conventional commercial banks, the MPLB was set at 6% of third-party funds in rupiah and 4.5% for sharia banks, which can be used for repo transactions with Bank Indonesia in the context of open market operations.

In terms of capital, Bank Indonesia once again held the CCyB at 0%. A 0% CCyB implies that the banking industry is not obligated to maintain additional capital reserves. The CCyB was set at 0% based on an assessment of financial sector conditions, which indicated a further opportunity for the banking industry to optimise intermediation growth based on the credit-to-GDP gap. Such conditions were also confirmed by supporting macroeconomic and banking indicators.

Bank Indonesia continued to relax the LTV ratio for property loans, FTV ratio for property financing and downpayment requirements on automotive loans/financing to revive the intermediation function, particularly in the property and automotive sectors. With backward and forward linkages, the property and automotive sectors have a large multiplier effect on the economy as the targets of policy stimuli. The measures to relax LTV/FTV and downpayment requirements were maintained as a means to revive restrained property loan growth and overcome the deep automotive loan contraction. Furthermore, this was in line with government policy concerning PPnBM for certain motor vehicles and OJK policy to lower the RWA for collateralised housing loans and automotive loans. LTV/FTV policy was applicable to banks meeting NPL/NPF requirements up to 100%, with the downpayment requirements on automotive loans/finance set at a minimum of 0%. LTV/FTV and downpayment requirements were also relaxed for banks failing to meet the NPL/NPF requirements. In addition, Bank Indonesia removed regulations requiring gradual loan/financing disbursements for partially prepaid property. The range of policies were implemented and the banks obligated to comply with risk management and prudential principles.[20] LTV/FTV policy was set at a maximum of 100% and the downpayment requirements at a minimum of 0%, which was extended from 31st December 2021 to 31st December 2022[21].

Table 3.2.2.1. Comparison of Loan/Financing-to-Value (LTV/FTV) Ratio for Property Loans/Financing

LTV/FTV Ratio for Property Loans

	Banks Meeting NPL/NPF Criteria				Banks Not Meeting NPL/NPF Criteria					
	Property Loans/ Financing based on Murabahah & Istishna Contracts		Property Loans/ Financing based on MMQ & IMBT Contracts		Property Loans/ Financing based on Murabahah & Istishna Contracts			Property Loans/ Financing based on MMQ & IMBT Contracts		
Facilities	1	≥ 2	1	≥ 2	1	2	≥ 3	1	2	≥ 3
Landed House										
Tipe > 70	100%	100%	100%	100%	95%	90%	90%	95%	90%	90%
Tipe > 21 - 70	100%	100%	100%	100%	95%	95%	95%	95%	95%	95%
Tipe ≤ 21	100%	100%	100%	100%	100%	95%	95%	100%	95%	95%
Flats										
Tipe > 70	100%	100%	100%	100%	95%	90%	90%	95%	90%	90%
Tipe > 21 - 70	100%	100%	100%	100%	95%	95%	95%	95%	95%	95%
Tipe ≤ 21	100%	100%	100%	100%	100%	95%	95%	100%	95%	95%
Shop/Office House	100%	100%	100%	100%	95%	90%	90%	95%	90%	90%

LTV/FTV Ratio for Green Property Loans

	Banks Meeting NPL/NPF Criteria				Banks Not Meeting NPL/NPF Criteria					
	Property Loans/ Financing based on Murabahah & Istishna Contracts		Property Loans/ Financing based on MMQ & IMBT Contracts		Property Loans/ Financing based on Murabahah & Istishna Contracts			Property Loans/ Financing based on MMQ & IMBT Contracts		
Facilities	1	≥ 2	1	≥ 2	1	2	≥ 3	1	2	≥ 3
Landed House										
Tipe > 70	100%	100%	100%	100%	95%	90%	90%	95%	90%	90%
Tipe > 21 - 70	100%	100%	100%	100%	95%	95%	95%	95%	95%	95%
Tipe ≤ 21	100%	100%	100%	100%	100%	95%	95%	100%	95%	95%
Flats										
Tipe > 70	100%	100%	100%	100%	95%	90%	90%	95%	90%	90%
Tipe > 21 - 70	100%	100%	100%	100%	95%	95%	95%	95%	95%	95%
Tipe ≤ 21	100%	100%	100%	100%	100%	95%	95%	100%	95%	95%
Shop/Office House	100%	100%	100%	100%	95%	90%	90%	95%	90%	90%

*) NPL/NPF Criteria: 1. Gross NPL/NPF ratio < 5% (5 percent), and 2. Net NPL/NPF ratio < 5% (5 percent)

20 PBI No. 23/2/PBI/2021, as the third amendment to PBI No. 20/8/PBI/2018 concerning the Loan-to-Value Ratio for Property Loans, Financing-to-Value Ratio for Property Financing and Downpayment Requirements for Automotive Loans or Financing.

21 PADG No. 23/26/PADG/2021, dated 24th November 2021, as the third amendment to PADG No. 21/25/PADG/2019 concerning the Loan-to-Value Ratio for Property Loans, Financing-to-Value Ratio for Property Financing and Downpayment Requirements for Automotive Loans or Financing.

Table 3.2.2.2. Comparison of Minimum Downpayment Requirements

Vehicle Type	DP on Non-Green Vehicles		DP on Green Vehicles	
	Meeting NPL Requirements*	Not Meeting NPL Requirements*	Meeting NPL Requirements*	Not Meeting NPL Requirements*
Two Wheels	0%	10%	0%	10%
Three or More Wheels (Non-Commercial)	0%	10%	0%	10%
Three or More Wheels (Commercial)	0%	5%	0%	5%

*) NPL/NPF Criteria:

1. Gross NPL/NPF ratio < 5% (5 percent), and
2. Net NPL/NPF ratio < 5% (5 percent).

Bank Indonesia strengthened policies that promote financial and economic inclusion by modernising and refining the MSME credit/financing ratio into the RPIM. According to RPIM[22] policy, banks are required to disburse loans and/or financing to inclusive targets, namely MSMEs, corporate MSMEs and low-income individuals, thus supporting the recovery process, inclusive economic growth and financial system stability. Three modalities are available to banks to meet RPIM requirements, namely direct financing of the supply chain, financing through financial services institutions, public services agencies and/or corporate entities, as well as purchasing inclusive securities. The availability of three modalities provides greater flexibility for the banking industry to participate in MSME financing in line with the expertise and business models applied, while maintaining risk management and prudential principals. Expansion of the inclusive financing scheme using various modalities is expected to nurture innovation in the banking industry and deepen the financial markets.

Bank Indonesia strengthened RPIM[23] regulations in February 2022 to encourage the banking industry to contribute optimally to inclusive financing disbursements. This will ultimately support government targets for MSME empowerment as a driver of the national economy, while increasing access to finance for low-income individuals. According to the regulations, banks are required to contribute to the target RPIM based on the expertise and business model of each respective bank, while applying risk management and prudential principles. RPIM monitoring is coordinated by Bank Indonesia and OJK, with the banks required to stipulate the targeted RPIM level annually within the bank business plan (BBP).

Strengthening and accelerating monetary and macroprudential policy transmission, Bank Indonesia continued to publish its assessment of policy rate transmission to prime lending rates in the banking industry[24]. The publication aims to expand the dissemination of information to corporate and individual consumers, thus increasing governance, market discipline/conduct and healthy competition in the credit market. Since the first publication in February 2021, prime lending rates in the banking industry have tracked a downward trend, indicating stronger Bank Indonesia policy transmission. Moving forward, Bank Indonesia will continue to publish prime lending rates in the banking industry to strengthen the transmission of accommodative monetary and macroprudential policy as well as to bring down lending rates further.

The banking industry continued to lower interest rates in the second semester of 2022. From June-December 2021, PLR in the banking industry declined by an average of 13 basis points while the BI7DRR was held at 3.5%. Compared with the same period one year earlier, PLR fell by an average of 141bps (yoy) in December 2021. Consequently, the spread between PLR and BI7DRR narrowed from 636bps in December 2020 to 520bs in December 2021. Meanwhile, the spread between PLR and 1-month TD rate narrowed from 584bps in December 2020 to 574bps in December 2021 (Graph 3.2.2.1).

22 PBI No. 23/13/PBI/2021 concerning the Macroprudential Inclusive Financing Ratio for Conventional Commercial Banks, Sharia Banks and Sharia Business Units.

23 PBI No. 24/3/PBI/2022, as an amendment to PBI No. 23/13/PBI/2021 concerning the Macroprudential Inclusive Financing Ratio for Conventional Commercial Banks, Sharia Banks and Sharia Business Units.

24 The PLR is published by banks in accordance with POJK No. 37/POJK.03/2019, dated 19th December 2019, concerning Bank Report Transparency and Publication. The PLR is used as a base for setting the interest rate charged by the bank to debtors but does not consider the individual borrower's risk premium component. Therefore, the interest rate that is charged to debtors is not necessarily equal to the PLR.

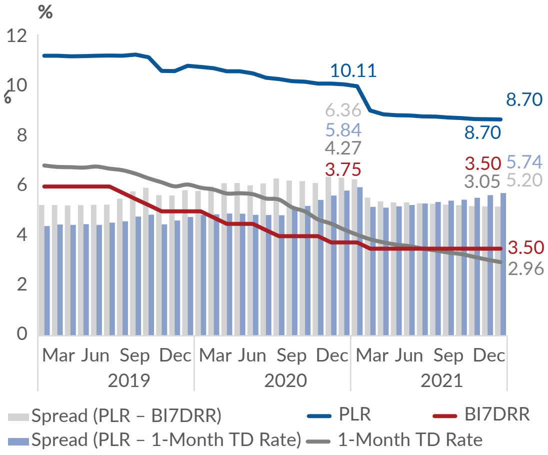
By bank group, state-owned banks were the main drivers of lower PLR in the banking industry, falling 209bps (yoy) in December 2021. Notwithstanding, state-owned banks maintained rigid PLR throughout the second semester of 2021, contrasting the larger reductions made by national private commercial banks (25bps), followed by regional government banks (22bps) and foreign bank branches (22bps) (Graph 3.2.2.2).

By component[25], the cost of loanable funds (CoLF) continued to track a decreasing trend. Maintaining the current trend, CoLF fell a further 104bps (yoy) in December 2021 (Graph 3.2.2.3). Annually, all bank groups reported a lower CoLF, led by state-owned banks (122bps yoy), followed by national private commercial banks (96bps yoy), regional government banks (91bps yoy) and foreign bank branches (74bps yoy). In the second semester of 2021, however, national private commercial banks recorded the most significant decline (32bps), followed by foreign bank branches (31bps), regional government banks (29bps) and state-owned banks (26bps) (Graph 3.2.2.4).

In the same period, overhead costs (OHC) and profit margin recorded an industry-wide decrease of 11bps (yoy) and 26bps (yoy) respectively (Graph 3.2.2.3). Conversely, OHC and profit margin increased in the second semester of 2021 by 7bps and 9bps respectively. The higher OHC component recorded in the second semester of 2021 was driven by regional government banks (14bps) and state-owned banks (15bps), contrasting 3bps and 2bps declines recorded at national private commercial banks and foreign bank branches (Graph 3.2.2.5). In terms of profit margin, the highest gain in the second semester of 2021 was reported by state-owned banks (12bps), national private commercial banks (10bps) and foreign bank branches (11bps). Meanwhile, regional government banks reported a 7bps decline in the profit margin (Graph 3.2.2.6).

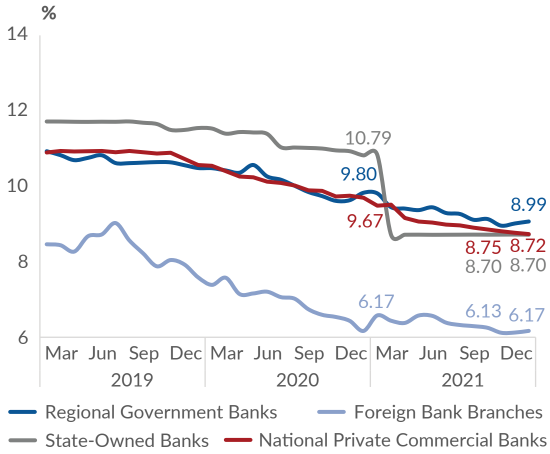
25 Pursuant to POJK No. 37/POJK.03/2019 concerning Bank Report Transparency and Publication, the PLR consists of three components, namely; (i) the cost of loanable funds (CoLF), including the cost of funds, cost of services, regulatory costs and other costs; (ii) overhead costs (OHC), including labour costs, education and training costs, research and development costs, rental costs, promotion and marketing costs, maintenance and repair costs, fixed asset and inventory depreciation costs as well as other overhead costs; and (iii) profit margin, which is determined by the respective bank for lending activity.

Graph 3.2.2.1. Prime Lending Rate, BI7DRR and 1-Month Term Deposit Rate Developments



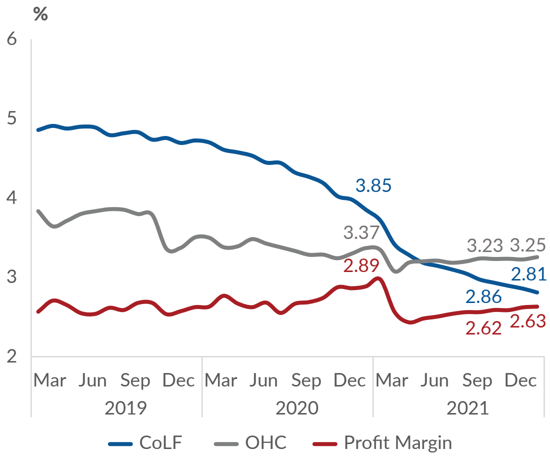
Source: OJK and Commercial Bank Reports, processed

Graph 3.2.2.2. Prime Lending Rates by Bank Group



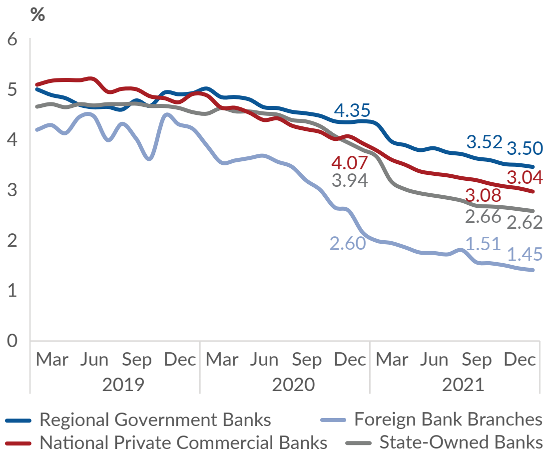
Source: OJK, processed

Graph 3.2.2.3. Prime Lending Rate by Component



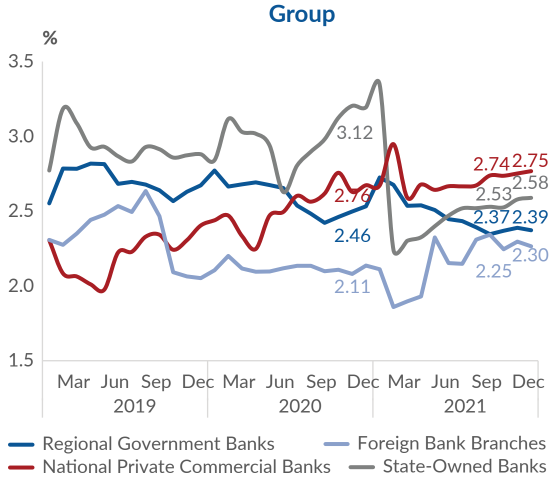
Source: OJK, processed

Graph 3.2.2.4. CoLF Component by Bank Group



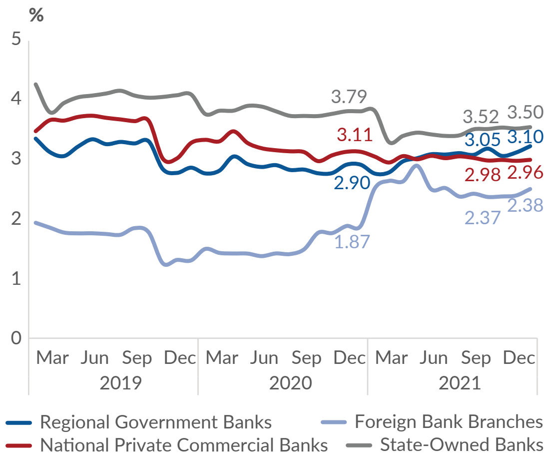
Source: OJK, processed

Graph 3.2.2.6. Profit Margin Component by Bank Group



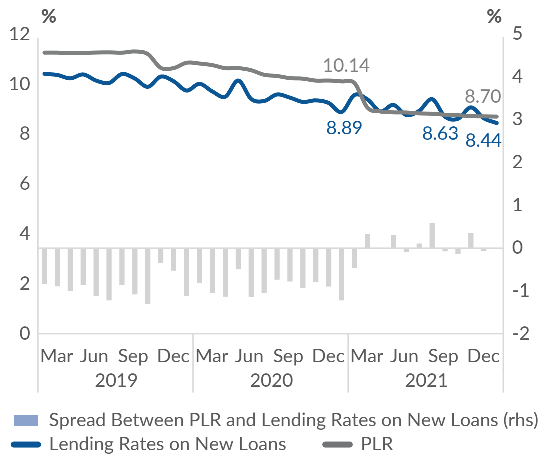
Source: OJK, processed

Graph 3.2.2.5. OHC Component by Bank Group



Source: OJK, processed

Graph 3.2.2.7. Lending Rates on New Rupiah Loans



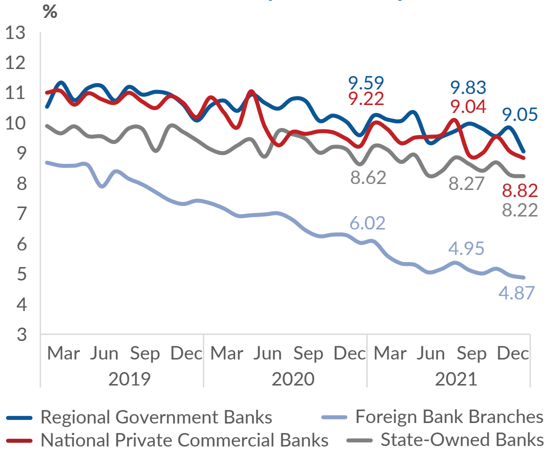
Source: OJK, processed

The banking industry lowered lending rates on new loans in line with PLR. Interest rates on new loans in December 2021 decreased 45bps (yoy) compared with the same period one year earlier (Graph 3.2.2.7). All bank groups reported lower lending rates on new loans in the reporting period, led by national private commercial banks (77bps), followed by regional government banks (49bps), foreign bank branches (29bps) and state-owned banks (17bps) (Graph 3.2.2.8).

Lower lending rates on new loans were consistent with improving risk perception in the banking industry, supported by a lower risk premium and LaR[26] (Graph3.2.2.9). In the second semester of 2021, the risk premium experienced a 6bps decline (Graph 3.2.2.10). The risk premium improved at regional government banks and national private commercial banks, falling 13bps and 11bps respective, contrasting rigidity at state-owned banks and a 1bps decrease at foreign bank branches (Graph 3.2.2.11).

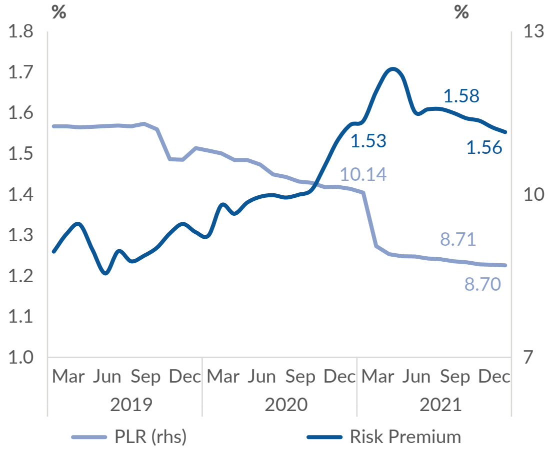
26 LaR include restructured outstanding loans with a collectability score of 1, outstanding loans with a collectability score of 2 as well as NPL.

Graph 3.2.2.8. Lending Rates on New Rupiah Loans by Bank Group



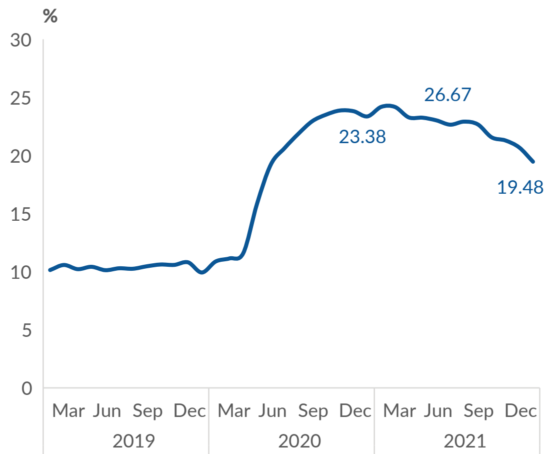
Source: OJK, processed

Graph 3.2.2.10. Risk Premium



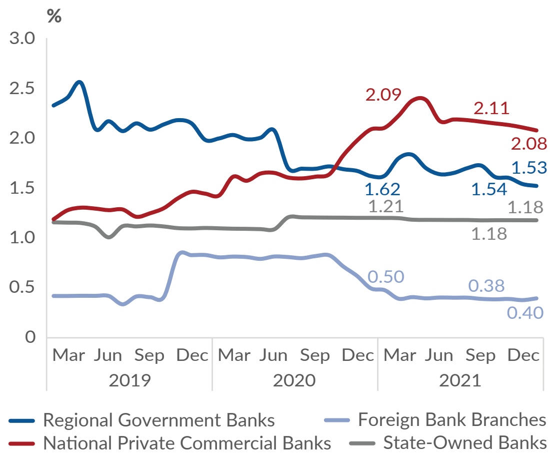
Source: OJK, processed

Graph 3.2.2.9. Loans at Risk (LaR)



Source: Bank Indonesia, processed

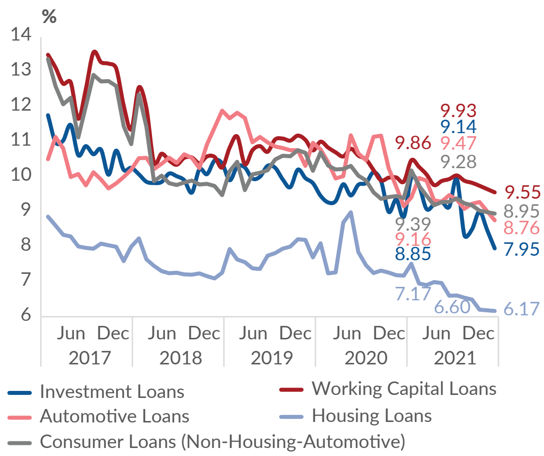
Graph 3.2.2.11. Risk Premium by Bank Group



Source: OJK, processed

Based on loan type, the banking industry reduced interest rates predominantly on new housing loans in December 2021, decreasing 101bps compared with conditions in 2020. This was followed by interest rates on new investment loans, which fell 90bps, other consumer loans (40bps) and working capital loans (31bps). In the second semester of 2021, however, the largest decline was observed in terms of interest rates on new investment (110bps), followed by automotive loans (73bps) and housing loans (43bps). In terms of the level, the lowest interest rate on new loans was recorded in terms of housing loans at 617bps in December 2021, followed by investment loans at 795bps (Graph 3.2.2.12).

Graph 3.2.2.12. Lending Rates by Loan Type



Source: Bank Indonesia, processed

Figure 3.2.2.2. Reserve Requirement Incentives

Disbursed Loans/Financing to Priority Sectors

1. Disbursed loans/financing to priority sectors receives a maximum incentive of up to 0.5% as follows:
   - 0.25% for banks with 3-month average yoy growth of ≥ 1.0-6.0%
   - 0.35% for banks with 3-month average yoy growth of > 6.0-8.0%
   - 0.5% for banks with 3-month average yoy growth of > 8.0%

RPIM Achievement

2. Achieving the RPIM target receives a maximum incentive of up to 0.5% as follows:
   - 0.2% for banks with an RPIM value of ≥ 10-20%
   - 0.3% for banks with an RPIM value of > 20-30%
   - 0.5% for banks with an RPIM value of ≥ 30%

Seeking to accelerate the national economic recovery process and increase financial inclusion, Bank Indonesia offered incentives for banks disbursing loans to specific sectors with a significant contribution to the economic recovery and banks disbursing inclusive financing.[27] The incentives took the form of looser rupiah average reserve requirements. The maximum incentive of 1% was available to banks meeting the specific criteria based on a tiered system according to merit. The criteria included disbursed loans/financing to priority sectors and fulfilling the RPIM. The incentive is available from 1st March 2022 - 31st December 2024.

3.2.3. Payment System Digitalisation to Accelerate Economic Recovery

Bank Indonesia continued various payment system digitalisation initiatives to accelerate economic growth. According to the Indonesia Payment System Blueprint (BSPI) 2025, payment system digitalisation in 2021 focused on three priorities and important achievements, including regulatory reform, retail payment system infrastructure and payment system standardisation.

Regulatory reform was undertaken as the basis to create a healthy, competitive and innovative payment system industry. Regulatory reform is expected to strike an optimal balance between efforts to optimise digital innovation opportunities to create a fast, affordable, convenient, secure and reliable (*cemumuah*) payment system and prioritising stability, broader access, consumer protection, healthy business practices and the application of best practices. Regulatory reform is integrated in terms of the regulatory umbrella, players and standards.[28]

Bank Indonesia continued to develop and expand retail payment system infrastructure to meet the transaction needs of the public through a fast, affordable, convenient, secure and reliable payment system. Bank Indonesia developed BI-FAST as national retail payment system infrastructure through an initiative to meet public needs and facilitate secure and efficient retail payments in real time and available 24/7. BI-FAST development is consistent with Bank Indonesia's policy direction moving forward, namely to create infrastructure that meets the 3i Principles of Integration, Interconnectivity and Interoperability. BI-FAST services represent a game changer in anticipation of evolving digital transactions moving forward, including cross-border transactions.

At the initial stage, BI-FAST implementation was oriented towards supporting transfer transactions with a maximum value of Rp250 million. Bank Indonesia also implemented BI-FAST pricing that charges participants Rp19 per transaction yet allows participants to charge their customers Rp2,500 per transaction. The price scheme will be implemented gradually based on periodic evaluations. In preparation for BI-FAST implementation, Bank Indonesia issued regulations as guidelines for participants and prospective participants.[29]

27 PBI No. 24/5/PBI/2022 concerning Incentives for Banks Disbursing Funds for Certain and Inclusive Economic Activities, and PADG No. 24/4/PADG/2022, dated 1st March 2022, as the Implementation Guidelines concerning Incentives for Banks Disbursing Funds for Certain and Inclusive Economic Activities.

28 PBI No. 22/23/PBI/2020 concerning the Payment System, PBI No. 23/6/PBI/2021 concerning Payment Service Providers, PBI No. 23/7/PBI/2021 concerning Payment System Infrastructure Operators and PBI No. 23/11/PBI/2021 concerning Payment System National Standards.

29 PADG No. 23/25/PADG/2021, dated 12th November 2021, concerning Implementation of Bank Indonesia-Fast Payment.

The payment system ecosystem was also expanded through payment system standardisation to create interoperability and integration between players in the payment system, while supporting an inclusive digital economy and finance. In terms of international practices, payment system standardisation was implemented on the front-end and back-end. In 2021, Bank Indonesia executed two standardisation initiatives, namely the expansion of QRIS national standards and issuing the SNAP.

QRIS standards in 2021 focused on ecosystem expansion. At the end of 2021, QRIS merchants totalled 14,779,978, recording 155.66% (yoy) growth. The target of 12 million merchants was reached in November 2021. Such impressive achievements were supported by various efforts, including contactless QRIS via social commerce, QRIS collaboration to support government programs, expansion of QRIS merchants for religious activities and QRIS support for MSME digitalisation. Synergy and coordination with the Government was also strengthened through the use of QRIS in the National Movement promoting pride in Indonesian-made products and Proud to Travel in Indonesia Movement (BWI). Moving forward, Bank Indonesia will continue to develop QRIS features as online and offline payment channels. A number of QRIS features are already under development, including cross-border QRIS payments and QRIS Transfer, Withdrawal, Deposit (QRIS TTS). On 17th August 2021, Bank Indonesia and Bank of Thailand (BoT) piloted the Cross-Border QR Code, allowing consumers and merchants in both countries to initiate and receive payments for goods and services via QR code instantly. In terms of QRIS TTS, Bank Indonesia is currently piloting Payment System Technology Innovation for QRIS Transfer, Withdrawal and Deposit. This feature is expected to provide a solution concerning the cash withdrawal and deposit needs of the public in general.

SNAP implementation aims to accelerate digital transformation between the banking and FinTech industries. Currently, the online payment channels and instruments available are diverse yet also fragmented, causing inefficiency in the connections via API due to a lack of standardisation. Launched on 17th August 2021, SNAP allows banks and FinTech platforms to provide various interlinked and interconnected payment transaction services. SNAP is expected to increase transaction volume and value as well as expand broad, fast, secure and affordable consumer services.

Policy synergy between Bank Indonesia and the Government was strengthened in terms of the digital economy and finance as well as electronification. The strategy deployed includes electronification of regional government transactions, social aid program (bansos) disbursements and multimodal transportation. Bank Indonesia continued to promote the use of technology, product innovation and distribution channels in the regional government environment through the creation of Regional Digitalisation Acceleration and Expansion Teams (TP2DD). Bank Indonesia also lent support to a pilot project for bansos digitalisation to increase the realisation of government expenditures. Coordination with relevant government ministries and agencies also facilitated the electronification and integration of multimodal transportation payments, while supporting the application of contactless technology on Indonesia's toll roads.

In 2021, Bank Indonesia strengthen cashless payment system policy to accelerate the economic recovery. In implementation, Bank Indonesia issued and maintained several policies (Table 3.2.3.1).

Table 3.2.3.1. Cashless Payment System Policies

No.	Policy	Effective Period
1	• SKNBI pricing of Rp1 from Bank Indonesia to Banks and up to Rp2,900 from Banks to their Customers • RTGS pricing of Rp30,000 from Banks to their Customers	Until 30th June 2022
2	• Minimum monthly payment on credit cards reduced to 5% from 10% • Late payment penalty set at 1% of outstanding balance up to a maximum of Rp100,000 • Maximum credit card interest rate	
3	QRIS Merchant Discount Rate (MDR): • Held at 0% for micro merchants • Reduced from 0.7% to 0.4% for public services agencies (BLU) and public service obligations	
4	Raised QRIS transaction limit from Rp2 million to Rp5 million	From May 2021
5	Raised the ATM cash withdrawal limit from Rp15 million to Rp20 million	12th July 2021 – 30th September 2021

Source : Bank Indonesia

3.2.4. Financial Market Deepening

Bank Indonesia continued to accelerate money market deepening in the reporting period to strengthen monetary policy effectiveness and support the economic recovery. Money market deepening is a policy priority as part of the strategy to support the execution of duties and responsibilities mandated to Bank Indonesia in terms of price and exchange rate stability. The policy orientation of money market deepening for 2021-2025 is contained within the Blueprint for Money Market Development (BPPU) 2025. BPPU implementation is achieved through three main initiatives: (i) advancing digitalisation and strengthening financial market infrastructure, (ii) strengthening monetary policy transmission effectiveness, and (iii) developing sources of economic financing and risk management.

3.2.4.1. Advancing Digitalisation and Strengthening Financial Market Infrastructures

Efforts to mitigate risk from over-the-counter (OTC) derivatives are an important aspect of maintaining global financial system stability. At the Pittsburgh Summit in 2009, G20 member countries agreed global financial system reforms, including OTC Derivative Market Reforms. One focus of the reforms is improving the financial market ecosystem, specifically financial market infrastructures (FMIs). The G20 OTC Derivative Market Reforms agreed three key commitments as follows:

1. All standardised OTC derivative contracts should be traded on exchanges or electronic trading platforms,
2. OTC derivative transactions should be cleared through central counterparties (CCP), and
3. OTC derivative transactions should be reported to trade repositories.

Those three key commitments form the basis of financial market infrastructure development in Indonesia.

Financial market infrastructure development, as contained in BPPU 2025, begins with strengthening and developing trading venues. This was achieved through the implementation of an Electronic Trading Platform (ETP) Multimatching System and formulation of regulations requiring mandatory trading via ETP (standardised transactions). Application of the ETP multimatching system is expected to accelerate money and foreign exchange market deepening by increasing liquidity, efficiency and pricing transparency. At the preliminary stage, the multimatching system was implemented for FX spot transactions, which increased transaction volume significantly. In the next stage, strengthening the trading venues focused on bilateral and multilateral ETP development for DNDF and repo transactions.

Bank Indonesia encourages transactions through ETP to support a fair and transparent pricing process, while simultaneously increasing efficiency. A BIS study (2019)[30] demonstrated an upward trend of electronic-based exchange rate transactions. In accordance with the BIS study, Bank Indonesia supports transaction innovation while prioritising risk management and prudential principles. This was facilitated pursuant to PBI No. 21/5/PBI/2015 concerning the Implementation of Money and Foreign Exchange Market Operators, which aims to increase ETP use to create fair, regulated, transparent, liquid and efficient money and foreign exchange markets.

In addition to ETP, financial market infrastructure development also involved the creation of a Central Counterparty for OTC Interest Rate and Exchange Rate Derivatives (CCP SBNT). The G20 OTC derivative market reform agenda emphasises the importance of standardised derivative contracts and clearing through a CCP to maintain global financial stability. As a G20 member, Indonesia strives to implement that agenda, which includes establishing a CCP for the domestic financial markets. CCP development was implemented in synergy with other authorities in the financial sector, involving prospective CCPs and various stakeholders from banking associations and professional associations domestically and internationally. Preparations include various aspects, such as the legal basis, regulations, institutional arrangements, operational business, system and supervision. There is currently one potential CCP in Indonesia, which has applied to Bank Indonesia for a business license.

The operationalisation of CCP SBNT represents one effort to create and maintain liquid, deep, transparent, inclusive and secure financial markets. One of the main roles of CCP is to moderate credit risk among market players by taking on the counterparty risk through novation. In addition, CCP also adopted the concept of multilateral netting in transaction settlement, which is expected to increase market efficiency and transparency. With such a strategic role in facilitating money market transactions, the CCP is a new systemic financial institution that must be regulated and supervised by the competent authority considering that the CCP is connected financially to all clearing members, custodians and other financial institutions. In implementation, the supervisory framework for CCPs must align with the Principles for Financial Market Infrastructures (PFMI) and refer to international standards and best practices in countries with an existing CCP. Therefore, a robust oversight mechanism is required as an integral part of efforts to create a secure, reliable and efficient CCP.

3.2.4.2. Strengthening Monetary Policy Transmission Effectiveness

In addition to strengthening infrastructure, Bank Indonesia also strives to enhance monetary policy transmission effectiveness through money market product development. The development of derivative transactions will boost investment and increase long-term transactions and bond market liquidity. The development of interest rate derivative contracts plays a crucial role supporting effective monetary policy transmission to the real sector through their function in terms of mitigating market risk. Development efforts refer to the 3P+1I framework, namely product, participants, pricing and infrastructure. In terms of the product, Overnight Index Swaps (OIS) were developed in coordination with financial market associations for hedging transactions based on forward-looking rates. Prevailing regulations concerning derivative contracts were also reviewed to encourage long-term hedging transactions. In terms of the participants, Bank Indonesia collaborated in synergy with other authorities to expand interest-rate derivatives and offer education to the banking industry. In terms of pricing and infrastructure, in addition to the CCP SBNT, Bank Indonesia also cooperates with Bloomberg to provide OIS price quotations.

In 2021, Bank Indonesia implemented integrated socialisation activities concerning regulations on rupiah interest rate derivative contracts[31] and revised OIS market conventions[32]. Mass

30 Bank of International Settlements. (2019). Triennial Central Bank Survey of Foreign Exchange and Over-the-counter (OTC) Derivatives Markets in 2019. Downloaded from https://www.bis.org/statistics/rpfx19.htm

31 In accordance with PBI No. 20/13/PBI/2018 concerning Rupiah Interest Rate Derivative Contracts and PADG No. 21/13/PADG/2019 concerning Rupiah Interest Rate Derivative Contracts in the form of Interest Rate Swaps.

32 Revised OIS Market Conventions published via Indonesia Foreign Exchange Market Committee (IFEMC) website on 30th April 2019.

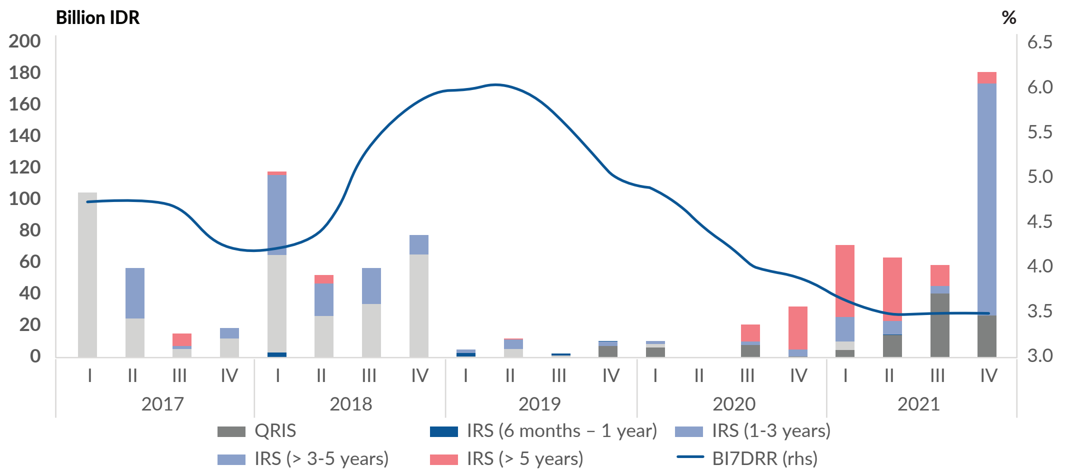
development and socialisation efforts have had a significant impact on OIS transactions. In 2021, the volume of interest rate derivative transactions increased on the previous year to reach a daily average of Rp84.0 billion, up Rp14.4 billion on the previous year (Graph 3.2.4.2.1).

OIS development was also part of the domestic benchmark reform agenda. In line with the global benchmark reform, Bank Indonesia strengthened benchmark rates for domestic markets using transaction-based data. Bank Indonesia developed the OIS benchmark rate that can be used for the formation of term structures for various money market transactions. In terms of implementation, OIS market strengthening referred to the 3P+1I framework. On the product side, Bank Indonesia recommended the use of risk free rates (IndONIA) as the basis for pricing financial products, including use of risk free rates (RFR) in the issue price component of financial instruments. This was done through coordination with other relevant authorities (OJK) and associations (IFEMC and NWGBR). In terms of participants, educational activities targeted market players concerning the function and specific details and terms of interest rate derivative contracts, while simultaneously encouraging the use of international standard contracts (ISDA or PIDI). Regarding pricing and infrastructure, development efforts focused on encouraging the use of trading platforms in OIS transactions and settlement through CCP SBNT, including assessing standardised reporting of OIS transactions. The various efforts are expected to increase OIS transactions with longer maturities.

In addition to the development of interest rate derivative products, Bank Indonesia also instituted rupiah exchange rate stabilisation policy. One breakthrough was the use of local currency settlement (LCS) for bilateral transactions between Indonesia and trading partners. LCS was developed to overcome structural issues in the domestic economy, namely a dependence on certain currencies, where more than 90% of cross-border transactions involving the trade of goods and services used one specific currency. In reality, Indonesian trade is dominated by countries in Asia and the Middle East, accounting for 72% of total trade. The dominance of certain currencies in international trade, therefore, has a significant impact during periods of high currency volatility.

Seeking to reduce dependence on certain currencies and strengthen the stability of local currencies, Bank Indonesia signed Memorandums of Understanding (MoU) in 2016 with Bank Negara Malaysia and the Bank of Thailand concerning LCS to promote the use of local currencies (rupiah, ringgit and baht). The LCS scheme was subsequently implemented in 2018 and then expanded in 2020 to the Japan Ministry of Finance (JMOF) and in September 2021 to the People's Bank of China (PBoC). Providing greater transaction convenience, flexibility and efficiency, the LCS framework was expanded by relaxing several Foreign Exchange Administration (FEA) rules. In addition, the LCS cooperation framework was strengthened in terms of access, administration and scope of transactions as follows: (i) expanding the underlying transactions to include trade, remittances

Graph 3.2.4.2.1. Average Daily Rupiah IRS/OIS Transaction Volume

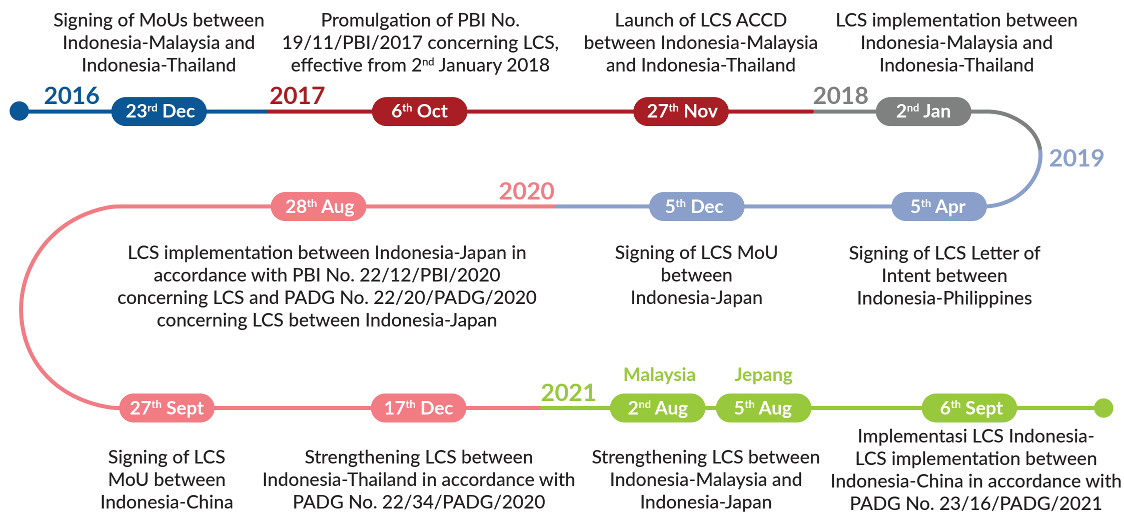


and direct investment, (ii) relaxing the threshold for the submission of underlying documents, (iii) expanding LCS hedging instruments, including cross currency swaps and domestic non-deliverable forwards, (iv) simplifying bank reporting, and (v) increasing the number of appointed cross currency dealer banks to facilitate LCS. Bank Indonesia also promotes the use of local currency settlement through synergy with regulators and greater acceptance amongst market players.

Since implementation, LCS transactions have increased significantly. Total LCS transactions in 2021 reached USD2.53 billion, representing a threefold increase on the USD797 million recorded in 2020. The most notable increases were recorded in terms of LCS transactions between Indonesia and Japan, which averaged USD95 million per month, followed by LCS transactions between Indonesia and China, averaging USD128 million per month. Regarding composition, LCS transactions are dominated by interbank transactions (50%), followed by trade (35%), remittances (14%) and direct investments (1%).

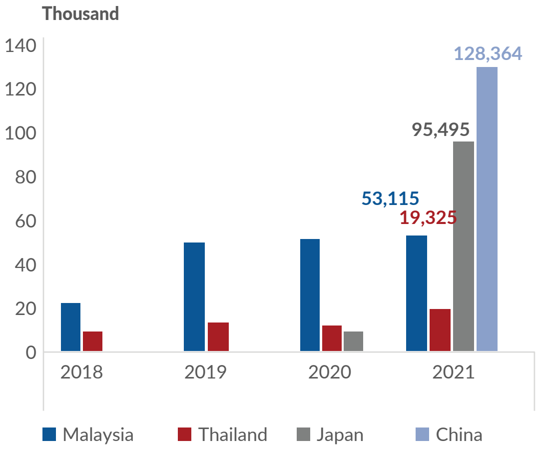
Strengthening the LCS framework is part of Bank Indonesia's strategy to recover export-import performance in Indonesia. Bank Indonesia works in synergy with several relevant authorities and the financial industry to support the national economic recovery. One such form of synergy is Government Regulation No. 23 of 2020, stipulating that government ministries/agencies can provide convenience, facilities, incentives and export-import services in accordance with prevailing laws and regulations. This provides a broad opportunity for business players to utilise LCS. Meanwhile, the use of local currencies through LCS schemes has a number of benefits. First, increasing the cost efficiency of foreign exchange transaction through direct quotation. Currently, payments between countries typically use an intermediary currency, such as US dollars, necessitating two conversions. LCS schemes reduce the number of conversions to one. Second, businesses can utilise LCS schemes to diversify currencies as a currency risk mitigation technique. Mass diversification using local currencies builds domestic financial market resilience in the face of external risks. Third, LCS schemes can reduce transfer costs for Indonesian migrant workers (PMI) by facilitating remittances and money transfers in partner countries, which is expected to increase foreign exchange receipts from migrant workers. In 2021, Bank Indonesia deployed a massive LCS campaign through webinars to increase coordination and public understanding of the LCS scheme, which will be continued in 2022.

Figure 3.2.4.2.1. LCS Framework Timeline



Source : Bank Indonesia

Graph 3.2.4.2.2. Average Monthly LCS Transactions



Source: OJK

3.2.4.3. Developing Economic Financing Sources and Risk Management

Under the auspices of the Coordination Forum for Development Financing through Financial Markets (FK-PPPK), Bank Indonesia collaborated in synergy with the Ministry of Finance, OJK and LPS to develop financial market instruments and infrastructures in the context of expanding economic financing sources. Several money market development programs have been announced as priority programs, including interconnectivity between the electric bonds clearing system (e-BOCS) of the Indonesia Stock Market Clearing House (KPEI) and the Bank Indonesia – Scripless Securities Settlement System (BI-SSSS). The National Working Group on Benchmark Reform (NWGBR) was also kicked off as a forum for financial sector authorities and market players to ensure a seamless transmission after discontinuation of the London Interbank Offered Rate (LIBOR). The domestic benchmark reform agenda has begun and recommendations concerning alternative benchmark rates/alternative reference rates (ARR) for domestic financial markets have been submitted. On the other hand, under the FK-PPPK, Bank Indonesia developed the repo market through repo standardisation between Bank Indonesia and the money market to provide greater convenience and uniformity when executing transactions, which is expected to increase repo transaction volume. Efforts to increase repo volume also entailed exploring the non-bank base, including insurance and pension funds.

Bank Indonesia was also involved with the FK-PPPK to develop the investor base in the financial markets. This was achieved through financial literacy webinars for retail investors, entitled LIKE IT. Events were held regularly to increase retail investor awareness and interest in the financial markets, while maintaining prudential principles. Efforts to expand the investor base also targeted the Indonesian diaspora in Asia-Pacific and Europe to invest in financial markets in Indonesia. In addition, FK-PPPK also strived to harmonise income tax regulations in the financial markets to reduce tariff barriers and calculation mechanisms, bringing greater alignment between the tax treatment of money market instruments and capital market instruments.

3.2.5. Strengthening Economic Inclusion and Green Finance

3.2.5.1. Strengthening Financial Inclusion to Support MSME Recovery

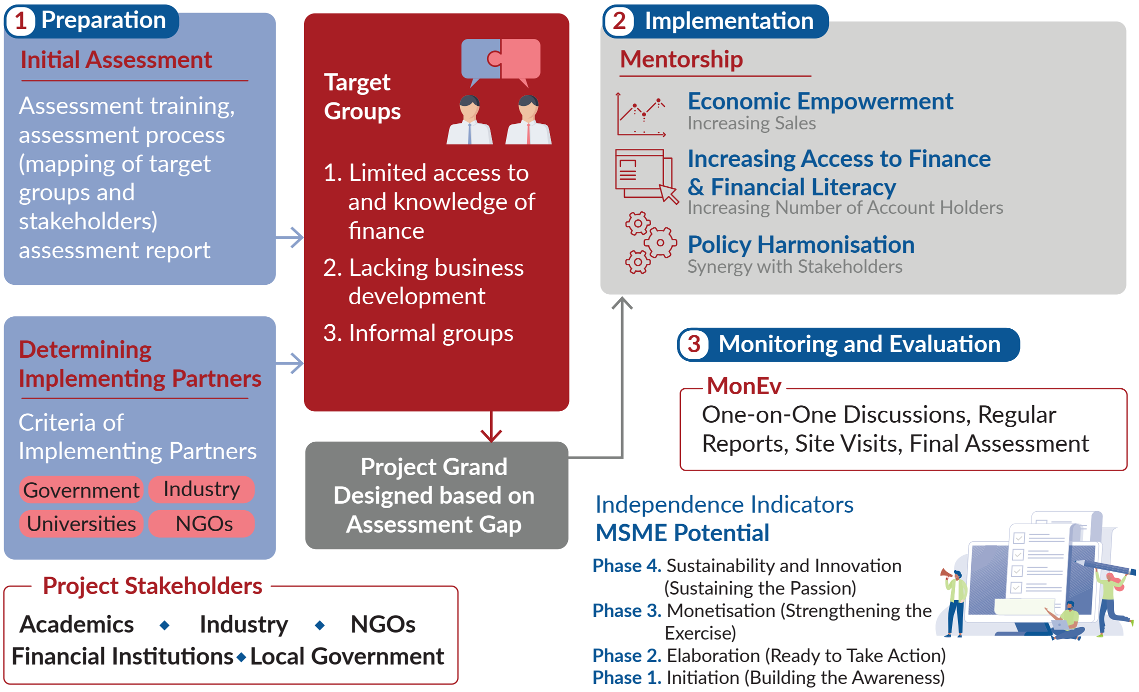
Helping MSMEs rebound from the pandemic, Bank Indonesia applied innovative policy strategies targeting low-income individuals and MSMEs. Support for low-income individuals was provided through financial inclusion to boost the productivity of subsistence groups. Meanwhile, MSMEs were helped to overcome pandemic conditions through digitalisation, unlocking market access and increasing access to finance.

1. **Strengthening Financial Inclusion**

   Financial inclusion is an important program to increase economic participation but is not considered adequate to ameliorate public welfare in and of itself. The financial inclusion program must be expanded, therefore to provide sustainable and comprehensive access to financial markets and goods markets (economic inclusion). One of the priority programs to achieve that goal is the development of economic and financial inclusion for subsistence groups that are economically vulnerable and generally have limited access to formal financial services.

   Providing support, since 2021 Bank Indonesia has implemented pilot projects of business models to empower subsistence groups. The initiative targets recipients of the social aid

Figure 3.2.5.1.1. Support for MSMEs



Source: Bank Indonesia

program with business start-ups who are committed to the program and have a growth mindset. Such entrepreneurs are expected to form prospective micro enterprises as well as increase access to and utilisation of formal financial products and services, thus increasing economic independence.

Seeking to increase economic independence, Bank Indonesia in synergy with local partners[33] **in various regions are providing mentorship for subsistence groups through education and literacy.** Program participants receive education on the financial aspects, business development and institutional arrangements; production and cultivation techniques; market access and access to finance; as well as infrastructure support. Pilot projects were implemented in eight regions where Bank Indonesia representative offices are located, namely Riau Islands, Jambi, South Sumatra, Central Java, Solo, Jember, West Kalimantan and Central Sulawesi. Most participants were recipients of social aid program disbursements and women, dominated by creative industries and agriculture.

Measuring program effectiveness through surveys demonstrated improvements in several indicators of economic activity and financial inclusion among the participants. In total, 78% of the participants became savings accountholders by the end of the program. Participant knowledge on financial products and services as well as financial planning and management also increased. In terms of business development, all subsistence groups subsequently undertook business activity. Regarding the institutional arrangements, 49 (16%) of 297 members were identified as local leaders, forming eight cooperative business groups recognised by the local government. In addition, a number of potential local champions emerged in each business group.

The key to success of mentorship for the subsistence groups lies in strong commitment and synergy between all parties involved. In addition, the experience and quality of the qualified mentors, preparation of program design as well as regular monitoring and evaluation were also critical elements. Those key factors of success form the basis of business

33 Local partners include socioeconomic institutions, community groups, MSME exporters and local government.

model replication to develop economic and financial inclusion among subsistence groups in all operational areas of Bank Indonesia representative offices in 2022.

2. **Efforts to Increase MSME Access to Finance**

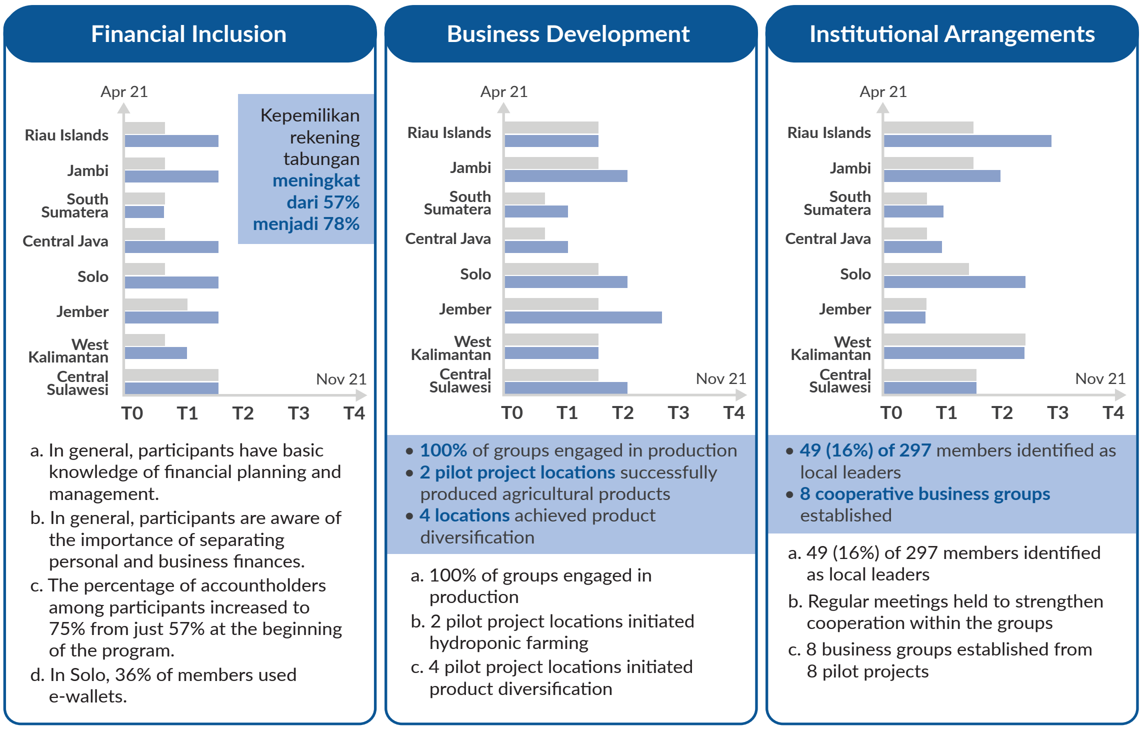
Seeking to expand MSME access to finance, Bank Indonesia developed the Financial Information Recording Application Information System (SIAPIK). SIAPIK affords greater convenience for MSMEs in terms of preparing financial reports, thus allowing formal financial institutions to assess the creditworthiness and business feasibility of MSMEs. SIAPIK is expected to minimise asymmetric information, which has been a persistent constraint for financial institutions when disbursing financing to MSMEs. Utilisation of SIAPIK by MSMEs has been expanded in synergy with relevant government ministries/agencies and e-commerce platforms, including the preparation of SIAPIK guidelines as well as socialisation and training activities.

In addition, Bank Indonesia also facilitated business matching in terms of financing for MSMEs under the mentorship of Bank Indonesia as well as Bank Indonesia partners in order to increase access to finance. Such activities include the Karya Kreatif Indonesia (KKI) exhibition and Indonesia Shari'a Economic Festival (ISEF). Business matching in 2021 unlocked access to formal finance for 99 MSMEs, totalling Rp37.12 billion.

3.2.5.2. Strengthening the Green Economy and Finance

The global economy, including Indonesia, is confronting the risk of climate change that could significantly undermine the sustainability of economic development. The industrial revolution that began in the 19th century has significantly increased greenhouse gases in the atmosphere and gradually raised global temperatures. In turn, higher global temperatures have triggered climate change, leading to more frequent extreme weather events, rising sea levels and storm surges, thereby

Figure 3.2.5.1.2. Mentorship Efforts for Subsistence MSMEs



Source : Bank Indonesia

intensifying pressures on the environment and ecosystems. This phenomenon has damaged infrastructure, disrupted distribution activity and reduced agricultural and maritime productivity, while posing a risk to worker health and productivity.

If left unchecked, climate change will have an adverse effect on monetary and financial system stability. The Aon Catastrophe Insight Report estimated that accumulated losses due to extreme weather from 2000 to 2020 reached a staggering USD5.1 billion. The Swiss Re Institute predicts losses caused by extreme weather to reach 18% of global GDP by 2050, with annual losses due to extreme weather in Indonesia expected to reach 40% of GDP. Those projections are consistent with data published by the National Development Planning Agency (Bappenas), estimating that the cost of extreme weather in Indonesia already exceeds Rp100 trillion per year. This figure is expected to increase exponentially in line with rising greenhouse gas emissions that cause climate change.[34] High potential losses due to extreme weather are exacerbated by Indonesia's geographical position as an archipelago situated on the Ring of Fire with millions of people inhabiting coastal regions. With livelihoods in Indonesia dominated by the maritime and agricultural sectors, Indonesia is particularly vulnerable to climate change, which causes massive waves, tidal flooding, droughts and various other natural disasters.

Stronger commitment and strategic plans towards realising a low carbon economy have become a growing concern in various jurisdictions to reduce the risk of climate change. Joint commitment and collective efforts to reduce greenhouse gas emissions globally are required towards sustainable development. Globally, more than 170 countries have signed the Paris Agreement, which seeks to hold the increase in the global average temperature to well below 2°C above preindustrial levels. Indonesia ratified the Paris Agreement in accordance with Act No. 16 of 2016 and has committed to reducing greenhouse gas emissions by 29% (unilaterally) or 41% (with international assistance) against business as usual by 2030. In addition, Indonesia has also announced plans to become Carbon Neutral by 2060.

Bank Indonesia places a lot of emphasis and attention on development of the green economy and finance to support sustainable economic development. Bank Indonesia policy to support the transition towards a low carbon economy spans six phases that began in 2010, namely Initiation (2010-2015), Formulation (2016-2020), Development (2021-2025), Strengthening (2026-2030), Expansion (2031-2059) and Maturing (> 2060).

During the initiation phase, Bank Indonesia prepared and formulated the direction of Green Banking Policy. The initiation phase began with green banking research and the signing of a joint decree between Bank Indonesia and the Ministry for the Environment concerning coordination to expand the banking industry's role in environmental management and conservation. This was followed by cooperation with the International Finance Corporation (IFC) to explore green finance developments internationally in 2011. In May 2012, Bank Indonesia co-founded the Sustainable Banking Network (SBM), which was

34 Weather, Climate & Catastrophe Insight — 2020 Annual Report, Published 2021.

proposed at the International Green Credit Forum (subsequently known as the 1st Sustainable Banking Network Annual Meeting) organised by the China Banking Regulatory Commission (CBRC) in synergy with IFC. With the transfer of the bank supervision function from Bank Indonesia to OJK, in accordance with the OJK Act (No. 21) of 2011, and the subsequent transfer of bank supervision from Bank Indonesia to OJK at the end of 2013, green banking research and policy as well as SBN membership were transferred from Bank Indonesia to OJK. In 2014, OJK published the Phase 1 Sustainable Finance Roadmap (2015-2019) and Clean Energy Handbook for Financial Institutions in 2015.

In the formulation stage (2016-2020), Bank Indonesia focused on internal strengthening as an exemplar of the green transition for financial institutions. During this period, Bank Indonesia began to adopt the Sustainable and Responsible Investment Framework and gradually increased holdings of sustainable bonds, currently standing at USD5.8 billion. In terms of policy, Bank Indonesia issued LTV and downpayment policy to stimulate growth of green property financing and loans for battery electric vehicles. Bank Indonesia also increased coordination with other global regulators through participation in the Network for Greening the Financial System (NGFS) and ASEAN Senior Level Committee (SLC) Task Force on Sustainable Finance. Awareness of environmental issues is also built among BI employees through the adoption of a green curriculum for training and socialisation activities. The remaining development phases are explained in Subchapter 4.5.

Box 3.1

Overseeing the Priority Agenda of Indonesia's G20 Presidency in Finance Track

At the G20 Leaders' Summit in Rome, incumbent G20 President, Italy, on 30th-31st October 2021 confirmed that Indonesia would assume the G20 Presidency in 2022. This was the first opportunity for Indonesia since the G20 was established in 1999. During the Presidency, Indonesia sets the priority agenda and chairs the series of G20 meetings. Indonesia is utilising this moment as a contribution to accelerate balanced, sustainable and inclusive global economic recovery momentum among advanced and developing economies.

The overarching priority of Indonesia's G20 Presidency in 2022 is Recover Together, Recover Stronger. The priority emphasises three main pillars, namely strengthening the global health architecture, the transition to sustainable energy and digital transformation. The three priority pillars are discussed based on two tracks, namely the Sherpa Track and the Finance Track. More specifically, the finance track discussions involve six priority agendas as follows:

1. Coordination of Exit Strategy to Support Global Recovery

During the pandemic, unprecedented and extraordinary fiscal, monetary, macroprudential and macroprudential policies were instituted to overcome the deleterious impact on the economy and financial sector. Policy normalisation in advanced economies could potentially exacerbate pressures on developing economies through capital flow dynamics caused by changes in market sentiment amid high levels of post-pandemic debt. Global cooperation and policy communication play a key role in the exit strategy agenda to ensure the economic recovery process remains convergent (recover together). Towards that end, the G20 Presidency will discuss well-calibrated, well-planned and well-communicated exit strategies to ensure a balanced, sustainable and inclusive global recovery.

2. Efforts to deal with the effects of the pandemic (scaring effects) on the economy to support stronger growth in the future

A divergent and multispeed economic recovery has not only emerged between countries but also between economic sectors. The agenda of Indonesia's G20 Presidency, therefore, aims to continue recovery efforts in sectors impacted by the pandemic to stimulate stronger economic growth (recover stronger). Discussions in the G20 forum will focus on identifying the potential consequences of the COVID-19 pandemic in the medium-long term on the global economy and financial sector, as well as an optimal response to overcome the scarring effect of the pandemic on various sectors.

3. Strengthening Payment System in the Digital Era

Digitalisation has the potential to create an inclusive, transparent and effective cross-border payment system, thus contributing to balanced and solid global economic growth. Indonesia's G20 Presidency, therefore, is committed to supporting the implementation of cross-border payments, including development of Central Bank Digital Currency (General Principles for Developing CBDC). Discussions will focus on efforts to increase efficient cross-border payment system interconnectivity and harmonious cross-border payment data exchange. In addition, CBDC development as new payment system infrastructure must consider the macrofinancial impact on the international economy and finance, including potential spillovers and capital flows.

4. Development of Sustainable Finance

In line with growing global attention concerning the impact of climate change on economic and financial stability, support is required to achieve carbon emission targets as part of the commitments in the Paris Agreement. The G20

Presidency will discuss this agenda with a focus on financing availability for the transition towards a green economy, while increasing the financial sector's ability to identify and manage climate risk.

5. Improvement of an Inclusive Financial System

As a follow-up action from the G20 Financial Inclusion Action Plan, the G20 Presidency will discuss financial inclusion, particularly the role of digital technology in terms of increasing MSME access to financing and marketing. The discussions will focus on utilising open banking to increase productivity and support economic and financial inclusion for unbanked communities, including women, youths and MSMEs. Increasing financial and financing digitalisation through innovative instruments unlocks opportunities to increase productivity and inclusion for MSMEs.

6. International Tax Agenda

The international tax agenda aims to create assurance and transparency in the tax regime and reduce tax avoidance. Discussions focus on implementation of the joint OECD/G20 framework concerning a tax planning strategy, known as Base Erosion and Profit Shifting (BEPS). Two international tax pillars are discussed.

First, tax for the digital sector and minimum effective tax rates globally. Rapid cross-border digital transformation has created challenges for the global tax system because large corporations can generate income without a physical presence in a given country, thus requiring a global agreement concerning tax mechanisms for the digital sector.

Second, global anti-base erosion rules, namely efforts to reduce tax avoidance amongst corporate taxpayers. In addition, international cooperation in terms of tax transparency and information exchange is also strengthened to accelerate the mobilisation of domestic revenues during the economic recovery from the pandemic.

The Financial Stability Board (FSB) was mandated by the G20 to support global financial stability through financial sector regulation. In this capacity, the FSB coordinates Indonesia's G20 priority agenda, specifically for the financial sector, encompassing the exit strategy and scarring effect, sustainable finance, strengthening resilience in the non-bank financial sector as well as risk mitigation and financial stability. Discussions also cover the impact on financial system stability of crypto assets, technological innovation and operational risk in the financial sector, such as cyber risk, as well as dependence on third-party services.

Chapter

04

OUTLOOK AND DIRECTION OF MACROPRUDENTIAL POLICY IN 2022: SAFEGUARDING AND ACCELERATING ECONOMIC RECOVERY BY MAINTAINING FINANCIAL SYSTEM RESILIENCE

The global and domestic economic recoveries are expected to persist on the back of a faster vaccination program rollout and expansionary policy stimuli, despite global uncertainty. Greater global economic recovery convergence is predicted compared with conditions in 2021, notwithstanding various risks stemming from elevated financial market uncertainty triggered by the plan to normalise monetary policy in advanced economies sooner than expected, geopolitical tensions between Russia and Ukraine, supply chain disruptions that could hamper world trade volume as well as escalating inflationary pressures caused by rising energy prices. Meanwhile, the global recovery will support the domestic economic outlook through its contribution to solid export performance, which is expected to remain intact. National economic growth is projected to increase, supported by greater public mobility as Covid-19 cases continue to fall and the vaccination program rollout gains momentum. Economic activity will increase as more economic sectors reopen and recover, coupled with policy synergy between relevant authorities to accelerate the national economic recovery. Bank Indonesia, therefore, projects national economic growth in 2022 at 4.7-5.5% (yoy).

Mirroring the national economic recovery outlook, financial system stability and resilience will be maintained and the intermediation function will continue to improve despite escalating external pressures. Global uncertainty, which will primarily stem from geopolitical tensions between Russia and Ukraine, could increase risk perception in the banking industry. Nevertheless, the banking industry is expected to maintain resilience based on ample liquidity and solid capital. Stronger corporate performance is anticipated given greater community mobility and growing global demand amid comparatively high commodity prices. Expectations of improving corporate performance will be accompanied by household sector gains in line with increasing activity and growing consumer confidence, thus driving private consumption. Similarly, financial inclusion is predicted to increase thanks to policy support and digitalisation. Consequently, loans and third-party funds are expected to grow in the 6-8% and 7-9% ranges respectively.

Monitoring the various economic dynamics and challenges moving forward, Bank Indonesia will implement an optimal policy mix in 2022 to stimulate economic growth and sustain financial system stability. The policy mix comprises five pillars, namely monetary, macroprudential, payment system policies, financial market deepening, as well as a green and inclusive economy and finance.

From a macroprudential perspective, the accommodative policy stance will be maintained to revive bank lending and support national economic recovery momentum, while maintaining financial system stability. Accommodative macroprudential policy instruments include the Macroprudential Intermediation Ratio (MIR), prime lending rate (PLR) transparency in the banking industry, the Countercyclical Capital Buffer (CCyB), Macroprudential Liquidity Buffer (MPLB), Loan/Financing-to-Value (LTV/FTV) ratios on housing loans and downpayment requirements on automotive loans, RR incentives and the Macroprudential Inclusive Financing Ratio (RPIM).

As a long-term sustainable effort, Bank Indonesia is formulating its Green Policy and Institutional Framework. This will support the national economic transition towards carbon neutrality in a just, orderly and affordable manner, while reinforcing the financial system against climate change risks and promoting excellence at Bank Indonesia as an exemplar of green economy and finance initiatives.

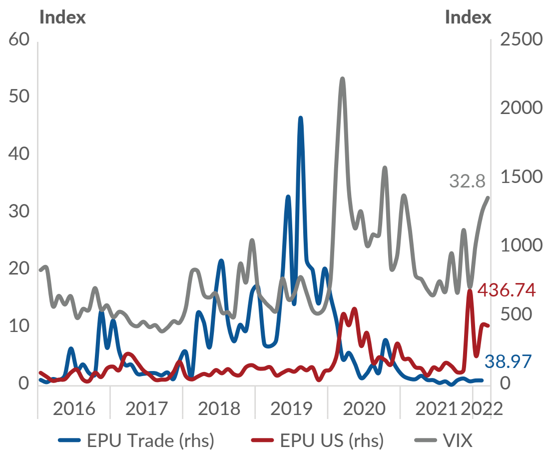
Seeking to increase policy effectiveness, Bank Indonesia will continue to strengthen synergy and collaboration between institutional members of the KSSK as well as other relevant government ministries/agencies. Policy synergy to revive lending by banks and other financial institutions to the real sector will continue to accelerate the economic recovery process, which includes overcoming the deep scarring effect of the COVID-19 pandemic in key economic drivers. At the same time, coordination and communication between institutional members of the KSSK will be improved to maintain financial system stability as mandated. Financial sector authorities will individually and collectively strive to detect potential financial system instability risks as early as possible and prepare an effective and efficient policy response.

4.1 Global Economic Recovery Convergence Expected in 2022

The global economic recovery remains intact though potentially slower than previously projected, accompanied by financial market uncertainty risk in response to escalating geopolitical tensions between Russia and Ukraine. Economic growth in various jurisdictions, including Europe, the United States, Japan, China and India, is solid yet potentially lower than expected. World trade volume continues to improve but is also possibly lower than anticipated given the risk of a subdued global economic recovery and ongoing supply chain disruptions. International commodity prices are rising, including energy, food and metal prices, thus intensifying inflationary pressures globally. Escalating geopolitical tensions and the ensuing sanctions placed on Russia are impacting trade, commodity price movements and global financial markets despite a flattening of the COVID-19 curve. Escalating geopolitical tensions between Russia and Ukraine have elevated global financial market uncertainty (Graph 4.1.1) not only due to interest rate hikes by the US Fed and faster monetary policy normalisation in other advanced economies, but also in response to persistent inflationary pressures on the back of higher energy prices. Risk perception is increasing, as reflected by a higher credit default swap (CDS) premium and Emerging Markets Bond Index (EMBI) spread in the period marked by Russia's invasion of Ukraine (Graph 4.1.2).

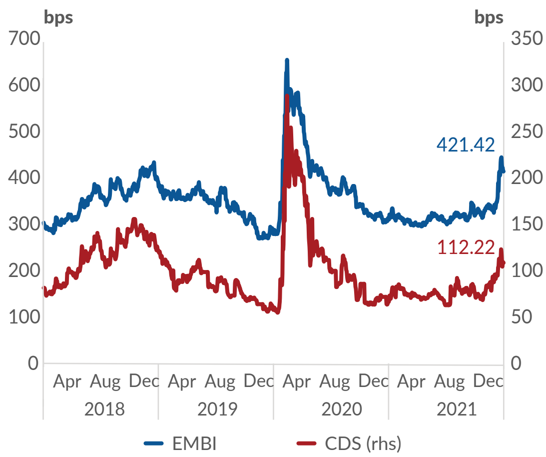
Mirroring global economic improvements, the domestic economic recovery is projected to endure, supported by synergy between Bank Indonesia's policy response and the national policy mix. National economic growth in Indonesia in 2022 is projected in the 4.7-5.5% range, though the impact of geopolitical tensions between Russia and Ukraine on the domestic economy demands vigilance. Faster economic growth in 2022 is driven by consistently solid export performance, despite the adverse impact of geopolitical tensions on world trade activity, coupled with increasing domestic demand in the form of consumption and investment. The economic recovery will persist as mobility increases given a flattening of the COVID-19 curve and faster vaccination program rollout, looser travel restrictions, broader reopening of priority sectors accompanied by optimal implementation of the Integrated Policy Package issued by KSSK, as well as fiscal stimuli from the Government and the Bank Indonesia policy mix.

Graph 4.1.1. Global Uncertainty Index



Source: Bloomberg

Graph 4.1.2. Risk Perception in Developing Economies and Indonesia



Source: Bloomberg

4.2 Solid Financial System Stability Forecast

The financial system is projected to remain stable given the promising economic recovery outlook. The bank intermediation function is expected to recover in line with the looser Lending Standards Index recorded in the first quarter of 2022 compared with conditions in the same period of 2021. Financial system resilience will also be sustained, primarily supported by ample liquidity and a solid capital base in the banking industry. In addition to factors of mobility and COVID-19 containment, financial system stability moving forward is also inextricably linked to successful policy synergy between Bank Indonesia, KSSK and relevant government ministries and agencies.

Given the promising economic outlook, the bank intermediation function in 2022 is also expected to recover. On the supply side, a lower Lending Standards Index in the first quarter of 2022 will induce lending. The Bank Business Plan 2022 also indicates that banks are expanding disbursed loans to all sectors. Meanwhile, third-party funds continue to increase, with potential moderation on the horizon due to the prospect of increasing capital expenditures in the corporate sector, particularly export-oriented manufacturing, as well as the commodities sector, coupled with the ongoing consumption recovery in the private sector. Such conditions are highlighted in the Bank Business Plan 2022, with growth of third-party funds projected to moderate on the previous year.

Externally, the promising bank intermediation outlook is supported by several factors, including subdued global economic gains and high international commodity prices compared with the historical average, combined with a less severe impact of the Omicron variant. Notwithstanding, intense external pressures, primarily linked to the geopolitical tensions between Russia and Ukraine, demand vigilance due to potentially higher risk perception in the banking industry and muted real sector improvements, which could ultimately impact credit in 2022 on the supply and demand sides. Moving forward, Bank Indonesia will maintain an accommodative macroprudential policy stance and policy synergy with relevant government ministries and agencies to revive the bank intermediation function. Bank Indonesia, therefore, projects growth of credit and third-party funds in the 6-8% and 7-9% ranges respectively.

Consistent with the favourable bank intermediation outlook, banking industry resilience will be maintained on the back of solid capital and ample liquidity. The CAR is forecast to remain above 20%, indicating adequate potential risk absorption capacity in the banking industry moving forward. On the other hand, OJK measures to extend the credit restructuring program for the banking industry, including the postponement of principal and interest payments, by extending POJK No. 17 of 2021 until March 2023, strengthened measures to control NPL and ultimately reinforced capital performance in the banking industry. Nevertheless, risk mitigation remains an ongoing concern. The banking industry is also expected to maintain prudential principles by increasing provisions for impairment losses based on the risk profile of each segment. On the other hand, bank liquidity will remain loose, thereby driving credit growth in 2022 as Bank Indonesia normalises reserve requirements incrementally by 300 basis points this year. A large liquidity buffer was maintained in the banking industry at the end of 2021, as confirmed by a ratio of liquid assets to third-party funds well above the threshold value.

Corporate performance, supported by commodity-based corporations, will continue to improve in 2022. Corporations specialising in coal and CPO will continue to gain broad-based traction in terms of sales and capital spending in response to increasing global demand and soaring international commodity prices. On the other hand, indications of stronger heavy equipment sales are expected to boost corporate capital spending in the first quarter of 2022. Moving forward, export-oriented companies are expected to begin increasing capacity in line with decreasing excess capacity and ample liquidity, thus facilitating capital expenditures. Corporate resilience is also predicted to increase in line with stronger corporate repayment capacity in 2022, as indicated by the debt service corporate ratio (DSCR) and interest coverage ratio (ICR). This also reflects improving credit risk in the corporate sector in line with increasing corporate repayment capacity.

Supported by household consumption, household sector performance is expected to show early signs of recovery in line with increasing public activity and consumer confidence. Stronger household consumption at the beginning of 2022 is expected to persist, primarily supported by the middle-upper segments, as reflected by increasing purchases of durable goods[35]. Such conditions were confirmed by an improvement in private spending across all income brackets, particularly the middle-upper segments.[36] Furthermore, the Consumer Confidence Index (CCI) increased at the beginning of 2022 to a level of 119.6, up from the historical average of 77.3-118.5 in the previous year. Based on the Consumer Survey conducted by Bank Indonesia, respondents cited improving consumer expectations of economic conditions moving forward, particularly income expectations, as the main driver of consumer confidence. In addition, several government programs, such as the ongoing social assistance program as well as extensions to the PPnBM and government-borne VAT program, are expected to stimulate private consumption. Improving household consumption is also consistent with the latest World Bank projection of household consumption growth in Indonesia in 2022 at approximately 5.2%.[37]

Financial inclusion, including MSME loans, is projected to increase on the supply and demand sides. From a supply perspective, several factors will drive MSME loan growth, including government policy to increase outstanding People's Business Loans (KUR) in line with a looser ILR for MSMEs. In addition, BI efforts to strengthen the RPIM are expected to not only revive lending to MSMEs, but also to boost loans extended to corporate MSMEs and low-income earners, along with expanding financing modality. On the demand side, efforts include bringing MSMEs together into clusters and MSME corporatisation[38], which is expected to increase financing to MSMEs and ultimately improve financial inclusion. Meanwhile, growth of digital banking will also contribute to greater financial inclusion with a focus on retail banking services for millennials as well as the middle-lower segments.

35 Based on the Bank Indonesia Consumer Survey, February 2021.

36 Based on the Individual Spending Index published by the Association of State-Owned Banks (HIMBARA).

37 Indonesia Economic Prospects (IEP), December 2021, World Bank.

38 MSME corporatisation involves MSME capacity building through the formation of business groups or entities, including value chain integration, to achieve economies of scale, unlock market access and expand access to finance.

4.3 Strengthening Accommodative Macroprudential Policy to Accelerate Economic Recovery and Maintain Financial System Stability

Bank Indonesia in 2022 will implement a policy mix across five policy pillars, namely monetary, macroprudential, payment system policies, financial market deepening as well as a green and inclusive economy and finance. Monetary policy will be oriented towards maintaining stability, while macroprudential policy, payment system policy, financial market deepening as well as the green and inclusive economy and finance will be directed towards reviving economic growth.

Bank Indonesia will maintain an accommodative macroprudential policy stance to revive bank lending and support national economic recovery momentum, while maintaining financial system stability. Accommodative macroprudential policy will be maintained in line with the Indonesia Financial Cycle, which is forecast to remain below the long-term trend in 2022. The accommodative macroprudential policy stance will be implemented through the following instruments: (i) CCyB, (ii) MPLB/ (sharia) MPLB, and (iii) LTV/FTV ratio on housing loans and downpayment requirements on automotive loans. In addition, Bank Indonesia will maintain and strengthen macroprudential policies that were formulated to revive bank financing, such as the MIR and PLR transparency in the banking industry.

In line with the disparate COVID-19 impact and divergent recovery across different economic sectors, Bank Indonesia issued macroprudential policy to revive lending to the corporate and priority sectors as well as to stimulate inclusive finance. Effective from 1st March 2022, the policies support the national economic recovery through incentives in the form of looser reserve requirements for banks extending inclusive financing as well as loans/financing to priority sectors. The incentives are provided based on the achievements of each respective bank in terms of credit growth in priority sectors and the macroprudential inclusive financing target, up to a maximum of 100 basis points. In addition to RR incentives, Bank Indonesia introduced the RPIM in 2022 to expand the banking industry's contribution in terms of lending to MSMEs, corporate MSMEs and low-income individuals. A number of strategies are used to enhance RPIM effectiveness, including: (i) MSME corporatisation and clustering through synergy with the Government, (ii) encouraging partnerships between banks and the corporate sector to finance the supply chain, (iii) encouraging cooperation between banks and disbursing partners, and (iv) developing securities and securitisation for MSME financing that meets the prevailing requirements.

4.4 Strengthening Macroprudential Supervision Coordination and Policy Synergy with KSSK

Bank Indonesia continues to strengthen policy synergy with the Government and KSSK. Synergy seeks to accelerate the vaccination program rollout and broader reopening of economic sectors, facilitate fiscal and monetary policy coordination as well as revive lending to the corporate and priority sectors in order to maintain macroeconomic and financial system stability as well as drive the national economic recovery.

Inter-authority policy synergy and coordination increases the effectiveness of accommodative macroprudential policy by Bank Indonesia. Policy synergy with KSSK is regularly strengthened to revive lending from the banking industry and other financial institutions, targeting the real sector. The availability of corporate financing is necessary to advance the economic recovery process and overcome the scarring effect of a prolonged COVID-19 pandemic on sectoral growth drivers. The identification and formulation of solutions to overcome demand-side issues in the corporate sector and supply-side issues in the banking industry are also strengthened through KSSK. The Government is providing various policy support, including State Budget instruments, to overcome the pandemic, provide social protection and fiscal incentives as well as greater convenience for other businesses. Furthermore, OJK will maintain various microprudential policy instruments, including stimuli for financial institutions, looser loan restructuring requirements as well as RWA and downpayment requirements for finance companies. LPS is committed to strengthening the deposit guarantee program by maintaining a low deposit insurance rate of 3.5% for rupiah third-party funds, 0.25% for foreign currency third-party funds and 6% for rural banks, while simultaneously relaxing fines on late guarantee premium payments.

In synergy with the Government, Bank Indonesia is expanding access to finance and accelerating MSME development, including low-income and subsistence groups, to help the MSME and inclusive sector recovery. In addition, Bank Indonesia is also developing sustainable finance through synergy with relevant government ministries and agencies to support the transition towards a green and sustainable financial system, including the formulation of macroprudential policies that support green finance.

Coordination between the macroprudential supervision of Bank Indonesia, microprudential supervision of OJK and deposit insurance of LPS will constantly be strengthened to maintain financial system stability. Supervisory cooperation based on the duties and responsibilities of each competent authority is an ongoing concern through the macro-microprudential coordination forum as well as bilaterally between Bank Indonesia and LPS. Tripartite coordination between Bank Indonesia, OJK and LPS includes discussions on the latest conditions of individual banks, liquidity assessments, credit quality, capital and corporate performance as well as macroeconomic aspects and the financial markets. Coordination aims to ensure that each authority is aware and has the necessary policy response prepared in a timely manner.

Synergy between the macroprudential policy of Bank Indonesia and microprudential policy of OJK will be maintained in 2022 by strengthening the mechanism for disbursing (sharia) short-term liquidity assistance. In 2021, as a follow-up action to Act No. 2 of 2020, Bank Indonesia and OJK signed a cooperation agreement concerning disbursement of (sharia) short-term liquidity assistance. The cooperation agreement strengthens the coordination mechanism between both institutions when disbursing (sharia) short-term liquidity assistance to illiquid yet solvent banks.

4.5 Strengthening Green Finance Policy towards Economic Sustainability

Supporting the transition towards a low-carbon economy, Bank Indonesia is accelerating green policy and institutional transformation with the support of national and global coordination. After the Initiation (2010-2015) and Formation (2016-2020) phases were completed, as explained in Subchapter 3.2.5, Bank Indonesia is currently in the Development phase (2021-2022). During this stage, Bank Indonesia is formulating its Green Policy and Institutional Framework to support the national economic transition towards carbon neutrality in a just, orderly and affordable manner, while reinforcing the financial system against climate change risks and promoting excellence at Bank Indonesia as an exemplar of green economy and finance initiatives. In terms of green policy, Bank Indonesia is strengthening studies on the implementation of green policy in relation to monetary operations, money markets, macroprudential policy, financial inclusion and the payment system. Furthermore, Bank Indonesia is also strengthening the institutional arrangements to support the transition towards a low-carbon economy, namely by reinforcing the strategy and governance, financial management, facilities and infrastructure as well as human resources.

Bank Indonesia continues to increase national and global coordination to strengthen the foundations of green policy development. At the global level, Bank Indonesia is actively involved in the G20 Sustainable Finance Working Group (SFWG) to achieve the G20 Sustainable Finance Roadmap agreed during Italy's G20 Presidency in 2021. Through Indonesia's G20 Presidency in 2022, Bank Indonesia encourages the SFWG to focus on three main areas of the G20 Roadmap, namely: (i) development of a transitional financial framework and increasing the credibility of commitments by financial institutions, including the identification of green activities and publication of green standards, (ii) increasing the instruments of sustainable finance focusing on accessibility and affordability, and (iii) strengthening discussions on policy incentives for green investment. At home, Bank Indonesia initiated the development of guidelines and measurement tools for carbon emissions in the corporate sector in synergy with the Coordinating Ministry for Maritime and Investment Affairs as well as the Ministry of the Environment and Forestry (Box 4.1). Furthermore, Bank Indonesia conducts joint research with OJK and LPS concerning the potential impact of climate change risk on the banking industry in Indonesia. Strengthening coordination, Bank Indonesia is also implementing internal transformation and raising public awareness through various capacity building activities, seminars, training and socialisation concerning green finance.

In line with policy framework development, Bank Indonesia supports the development of sustainable finance instruments, particularly green money market instruments. This initiative supports the development of sustainable finance national and forms part of the second pillar of the Bank Indonesia Green Finance Policy Framework 2021-2025 as an integral component of the Coordination Forum for Development Financing through Financial Markets (FK-PPPK). One tangible form of Bank Indonesia support for the development of sustainable finance instruments includes the Workshop on Sustainable Finance and Climate Change Impact held on 27th October 2021, supported by Standard Chartered and ICMA. At the meeting, various issues were discussed concerning sustainable finance, climate change and instruments currently under development, including green/sustainable repo transactions as well as green/sustainable derivative contracts. Such activities are expected to enrich public knowledge and provide inspiration, including government ministries and agencies, concerning the current rapid development of green money market instruments.

After the Development phase, Bank Indonesia will continue its support during the Strengthening (2026-2030), Expansion (2031-2059) and Maturing (> 2060) phases. During the Strengthening phase, Bank Indonesia will focus on policy strengthening to accelerate the reduction of carbon emissions by increasing the green credit portfolio in the banking industry to achieve the national carbon emission target by 2030. Furthermore, Bank Indonesia will formulate various policies during the Expansion phase, targeting the carbon emission target of the banking sector in accordance with the Paris Agreement. During the subsequent phase, Bank Indonesia will strengthen policies towards carbon neutrality by 2060 before the Maturing phase (> 2060), by which time the banking sector will have already achieved carbon neutrality.

Box 4.1

Innovation for Corporate Carbon Emission Measurement and Reporting

Efforts to reduce greenhouse gas (GHG) emissions are required to stem the rate of rising global temperatures and mitigate the risks posed by climate change. Seeking to achieve the lower carbon emission targets in accordance with the Paris Agreement, the G20 supports the International Financial Reporting Standards (IFRS) issued by the International Sustainability Standards Board (ISSB) to create international reporting standards referring to the recommendations of the FSB Task Force on Climate-Related Financial Disclosures (TCFD). Reporting standards are expected to facilitate green investment.

International financial reporting standards require corporations to measure and report their carbon emissions. Assisting corporations measure and report carbon emissions, Bank Indonesia in synergy with the Coordinating Ministry for Maritime and Investment Affairs as well as the Ministry of the Environment and Forestry are currently developing guidelines for corporations to measure and report carbon emissions. Carbon emissions are measured using a carbon calculator, which will be accessible via Bank Indonesia's website, while the reporting guidelines will be published on the official websites of Bank Indonesia, the Coordinating Ministry for Maritime and Investment Affairs as well as the Ministry of the Environment and Forestry.

In accordance with ISO 14064-1:2018, sources of corporate carbon emissions are divided into three classifications: (i) Direct Emissions – emissions directly caused by sources owned or controlled by a company, for example emissions from official vehicles and in-house power generation, (ii) Indirect Emissions – emissions from purchased electricity, and (iii) Indirect Emissions – emissions from sources not owned or controlled directly by a company, for example emissions from business travel, emissions from corporate funded projects and emissions from the distribution of goods by a third party.

The measurement of carbon emissions will be implemented gradually. The comprehensive publication of corporate carbon emissions is necessary to ensure corporations can calculate the carbon emissions produced by activities not under their direct control. During the preliminary stage, therefore, the measurement and reporting of corporate carbon emissions will only cover scope 1 and scope 2, with full implementation expected in 2026.

Banks are one of the largest carbon emitters, originating from the omissions of borrowers recognised by the banks. Considering that banks must recognise the emissions produced by debtors proportionally as their own emissions, constituting the dominant portion, banks must accurately calculate the emissions produced by their debtors. Moving forward, debtor emission reports will be a prerequisite when applying for loans or financing. Furthermore, banks will have to increase their portion of green finance gradually to meet lower carbon emission targets.

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